RURAL DEVELOPMENT IN INDIA

SOME FACETS

NATIONAL INSTITUTE OF RURAL DEVELOPMENT
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FOREWORD

The National Institute of Rural Development has been organising several training programmes as part of its servicing activity to central, state governments and other organisations In preparing the lectures for these courses, the Faculty of NIRD spend considerable time on collecting data, analysing and collating it for substantiating the presentations on various aspects

The need for a compilation dealing with different facets of rural development has been urged upon us This has prompted us to reduce into writing the lectures delivered by the Faculty members in these courses dealing with different facets of rural problems In some cases, the tone of the lectures has been retained, in others, the text has been separately developed These have time-reference up to April, 1979

Some of the aspects dealt with in these lectures are also the areas of special research by the NIRD

The problems of rural people are many and the aspects that have been touched in this volume are only a few Nevertheless, they are important from the point of view of understanding some of the rural development efforts and the problems

The opinions expressed herein are not intended to take any view on any issue but were designed as part of the exposition to evoke further discussion in the programme sessions.

This volume is the combined and enthusiastic effort of all the Faculty members I am grateful to all of them

NIRD, Hyderabad
April 25, 1979.

S K RAU

THE CONTRIBUTORS

1 Dr S Balakrishna
Director (Statistics)

2. Dr T.K. Chakravarty
Joint Director (Extension and Transfer of Technology)

3 Shri U V N. Charyulu
Joint Director (Human Resources Development)

4. Dr P.T George
Director (Economics)

5. Dr B N Gupta
Deputy Director (Human Resources Development)

6. Dr. S P Jain
Joint Director (Human Resources Development)

7. Dr. N.K Jaiswal
Director (Extension and Transfer of Technology)

8 Prof J S Mathur
Director (Human Resources Development)

9. Dr. A K. Mukhopadhyay
Deputy Director (Economics)

10. Dr. Mumtaz Thaha
Deputy Director (Integrated Area Development)

11. Dr L S.N Murthy
Assistant Director (Political Science and Public Administration)

12. Dr B C Muthayya
Director (Psychology)

13. Miss Nalini Vittal
Assistant Director (Extension and Transfer of Technology)

14. Dr K V Narayana Rao
Deputy Director (Political Science and Public Administration)

15 Dr K. S Ramesh
Deputy Director (Integrated Area Development)

16. Dr S.K Rau
Director General, NIRD

17. Dr Shiviah
Director (Political Science and Public Administration)

18. Shri R. N Tripathy
Deputy Director (Integrated Area Development)

19 Shri G L Verma
Assistant Director (Integrated Area Development)

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Section I

RURAL SOCIO-ECONOMIC SCENE

STRATEGIES OF RURAL DEVELOPMENT*

S K Rau

The adage that the most practical method is a sound theory is true in the case of achieving the needed rural transformation in India. The strategies adopted and the projects implemented have shown the impact of time, they have not always evolved but have been innovated with the requirements The experience has been rich and the results useful If a greater physical impact on the rural scene is not very prominent, it is more due to the dimension of the task and the intensity of the problems of the social and economic situations in the rural areas

The Community Development Movement

In the fifties, the community development (1952) and the national extension service (1953) were a forward looking attempt at a developmental administration, associating the people They had left an impression and many lessons They introduced a new ethos of multidimensional local development not necessarily Gandhian nor village-oriented They created a great awareness about development among the people The infrastructure now available in over 5,000 blocks has been the stable medium for the implementation of a large number of developmental programmes in the last quarter of a century But the structure created seems to have lasted longer than the content In some ways, the community development programme was dated The expansion of the movement was too rapid and was somewhat centrally directed. The personnel who could *induce* people to a new orientation either became jaded or fell in short supply The village–level worker (VLW) was deemed to be a change agent as also a technical consultant on all aspects of life The evolution of the new technology, the specialisation that was increasingly needed in the work of the several departments, the increased load of work in the development process gradually attenuated the original concept of a unified block-level administrative set-up

The transfer of the blocks by stages to the state administration created financial problems Appendix 1 would indicate that the percentage of expenditure specifically for community development and panchayats was 41 in the Second Plan, 29 6 in the Third Plan and only 4 08 in the Fifth Plan and 2 59 in the proposed Sixth Plan (1978–83) This was when the expenditure on agriculture and allied sectors increased three-fold over the three Plan periods Other departmental budgets, which were part of

* Based on the lecture notes in different Courses conducted by N.I.R.D to introduce the subject of Rural Development

the schematic pattern of the block budget. rapidly increased A cumulative total of 19 5 million compost pits dug by 1961–62 under the community development programme does not have much real significance nor a figure of 13 75 million of animals castrated of any significant impact in the total size of the concerned problems Appendix II, however, would give a general idea of the type of physical achievements One might say that the impact of the programme was ephemeral Though the spirit in the movement was gone, the skeletal remains, however, proved to be an extremely useful asset

The Shift towards Food Production

Above all, the community development programme got enervated also for want of food The situation by 1960s was rather critical on the food front Between 1947 and 1960, about 40.70 million tonnes was imported at a cost of Rs 17,158 million (for details see Appendix III) In 1961 itself, the food import bill was Rs 1,930 million It is not as if community development had not emphasised on agriculture But the effort for food production was not too monogamous[1] Agricultural development was one of the activities of community development, often lost sight of in effervescent verbiage Lack of technology was an inherent weakness for accelerating agricultural production, in spite of the sincere endeavours of the C D staff. The need for greater concentration on food production itself, almost in preference to the concept of all round development prevalent then, was reflected in the *Report on Indias Food Crisis and Steps to Meet It* (1959) by a team led by Dr Sherman E Johnson under the auspices of Ford Foundation It observed that "the rate of increase must be tripled to meet the Third Plan target If India's food production increases no faster than the present rates, the gap between supplies and target will be 28 million by 1965–66 This will be about 25 per cent shortfall in terms of need. No conceivable programme of imports or rationing can meet a crisis of this magnitude" "Food production must be given the highest priority It must have the sponsorship of top-most leaders who can and will mobilise the nation for action to meet the impending crisis". The team recommended that "those selected crops and those selected areas in each state should be chosen which have the greatest increased potentialities". "More effort should be concentrated on the most promising areas for wheat and rice production, *i e*, those which have had the most rapid rate of increase in the recent past, and which have also the highest potential for rapid large increases in the years immediately ahead".

The Intensive Agricultural Districts

These recommendations led to the strategy for locating well-endowed districts, and farms therein, capable of yielding higher agricultural production and marketable surplus. Consequently, there was greater concentration

on improving productivity per acre than on extending the acreage. A package programme was launched as the Intensive Agricultural District Programme (IADP), in the last year of the Second Plan (1960-61) and 37 districts in 14 states were covered by 1970 This was followed by the Intensive Agricultural Area Programme which also adopted the strategy of IADP, but less intensively By 1966, 117 districts, covering 1,596 blocks, and by 1970, 150 districts were brought under this programme (Appendix IV gives some other details) IADP advocated a selective area approach to agricultural development and the achievement of intensity of cropping Towards this, packages for extension services, and for improved production practices were designed Both knowledge and inputs were made available Preparation of farm plan was stressed incorporating the "package" needed for output increase These projects were further supplemented by commodity-wise production programmes, such as for cotton, sugarcane and jute.

The Programme was quite successful The experience gained in implementing it proved to be very instructive The technology component did not always keep pace with the demand The umbilical cord connecting the farmer to the reservoir of research did not function too well in some places The unevenness and irregularity in the supply of credit and essential fertilisers was also a drag on the implementation. The farm plans were sometimes unrealistic if not theoretical

The drought years of 1964-66 were really a harrowing experience but out of this crucible emerged the focus on the utilisation of the High-yielding Varieties (HYV) representing the needed mix of the research results and farm application. The infrastructure and the experience in IADP to some extent and the technology of the new varieties largely contributed to the optimism on the food production front The HYV which was originally launched in 1963-64, expanded sufficiently to cover 37 million hectares by 1977-78 The green revolution was activated by national and State demonstration efforts as also by a vigorous extension programme Added to it, a beginning was made in 1967 to spread widely the multi-cropping pattern and a target of 180 million hectares was virtually achieved

Inter-Farm Community and Intra-regional Disparities

The green revolution changed the mood and tempo of Indian agricultural efforts. It was possible to perceive a cessation in the flow of the "ship to mouth programme" The HYV programme threw up from the Pandora's box, thistless, miracles as well as pointers Among others, the concentration on irrigated areas and the intensity achieved in certain locales revealed the obverse of the coin in the form of regional imbalances. Areas such as eastern U P , parts of Bihar and most of Orissa, which are primarily rice growing, could not also acquire the benefit of the wheat revolution Within the intensive areas, those that could absorb modern

technology and had the means to obtain inputs benefited faster and more noticeably The new varieties brought with them their own susceptibilities for pests as also the need for greater attention to soil treatment, etc While technology was neutral, the affluent could meet the new situations, more effectively. Not a little of this was also due to the land structure This situation led to a pointed attention to the reduction of disparities between the affluent and the weaker sections in the rural areas, as also to the reduction of the inter-regional disequilibrium in economic growth

Small Farmers Development Agency

Attention was focussed by 1968–69 on the requirements of the small farmers. The All India Rural Credit Review Committee (1969) under the chairmanship of Shri B Venkatappaiah recommended the setting up of Small Farmers Development Agencies (SFDA) and Marginal Farmers and Agricultural Labourers' Development Agencies (MFAL), at least on a pilot basis. The SFDA was an innovation not only to obviate the disparity in the rural areas but also to specifically concentrate on the indigent sections of the rural population, the inter-farm divergencies in income have also to be tackled It was observed that marginal holdings below one hectare account for 51 per cent of about 70 million operational holdings; the marginal and small holdings up to two hectares, taken together, cover 70 per cent of the total holdings Hectares between two and four constitute 15 per cent The holdings between four and ten as also above 10, take away virtually 60 per cent of the total area The shift was towards larger production on small farms too and for effectively helping the lower landholding groups It was also noticed that the size of the small holding is no bar for intensity in production, they can increase the labour input per hectare and achieve higher yields if equal access to credit and material inputs is afforded to them. One hundred sixty-nine Agencies were established covering 200 districts and 1,807 blocks in 25 states/Union territories The programme also gathered intensity . about 164.64 lakh beneficiaries were indentified by 1978, 72 lakhs enrolled as members of cooperatives A total credit of 200 crores accrued to small farmers through the cooperative system up to November, 1978, that through commercial banks was 93 crores. In the course of actual operation it was found convenient to merge the agencies for small farmers and marginal farmers into one group. The introduction of a subsidy from government, attracting institutional credit for the balance of the project requirement was a special innovation with this programme Nowadays the advantages for small farmers are not being limited to the constituted areas only. In 1978–79, the benefit of subsidy to this category of farmers is extended outside the special areas as far as ARDC type of minor irrigation is concerned (The total result is in Appendix V).

An agency, specially designed to meet the requirements of the small farmers had the innovation of a thrust towards the target group, certain

amount of administrative decentralisation in the programme operations was introduced. This agency, established under the Societies Registration Act, could hold funds not too constrained by the financial-year restrictions Local decisions could also be taken by the members of the society, with malleability in inter-sectoral allocations that meet the specific programme requirements in any given area.

The concept of the *small holding* in terms of acreage in different agro-climatic situations of the country, and the paucity of authentic land records as also the inadequate credit flows caused lags in the initial stages, in the momentum that was expected in this programme But the critical introspection during this gestation period also led to greater attention being paid to the concept of viability of a small farmer who is largely dependant on agricultural avocation It was found necessary to supplement his income through subsidiary occupations such as animal husbandry, fishery, piggery, poultry and with a type of "agrallied" culture, and in some cases cottage industries too This led to the conjoint rise in non-farm activities with regular farm activities The concept of agriculture itself gradually widened. This had led to a concerted full utilisation of the available income possibilities to a rural family The seeds of the concept of "integration" are noticeable.

Land Reforms

Another dormant and persistent problem is that a skewed land system did not benefit the actual farmer, the concentration of land holding in a few and the consequent slackness in the intensity of cultivation have been a matter of serious concern almost since independence The *intermediaries* were first abolished The attempts to confer tenancy rights to actual cultivators is progressing fairly well An estimate is that about 3.7 million tenants acquired occupancy rights The legislation to avoid undue concentration of wealth in a few hands is available The implementational snags are inevitable But out of the lands declared as surplus, nearly 0.64 million hectares have been distributed to the needy tenants The dominance of land holding in any system of rural society should be recognised. About 20 million tenants were brought in direct relationship with the state Access to the resources would be fundamental for their appropriate utilisation and rural development with equity and efficiency. Hence the land reforms measures always come to the forefront in this perspective

Drought and Desert Areas

If the intensive agricultural area programme which concentrated on the irrigated areas and the genetic revolution of HYV sprang in these areas, the lack of attention to the disadvantaged was found to be glaring. Regional imbalances in the country, partly due to natural endowments, were getting

accentuated It was found absolutely necessary to tackle the dry areas which were prone to drought The Drought-prone Areas Programme (DPAP) emerged as a special attention project for an area. This area-wise programmes placed a premium on improving the quality of land, the restoration of an ecological balance and the evolution of a production pattern both for farm crops and for allied livestock activities A dry-farming production technology is also being evolved The soil and moisture conservation measures showed a particular impact in that 10.76 lakh hectares were covered The financial and physical achievements are given in Appendices VI and VIA In the overall drive to tackle the dry disadvantaged areas, the desert development programme covering tracts in Rajasthan, Haryana and Gujarat is another feature The programme emphasises an afforestation of shelter belts, grassland development and dunes stabilisation, along with groundwater development and moisture conservation The cropping patterns will be influenced by these activities

Between 1974 and 1978, the expenditure on DPAP was of the order of 211 crores of this, on agriculture it was Rs. 35 crores (16 5 per cent) and this is spread over soil conservation and crop-husbandry On an analysis of 44 districts, the proportion of expenditure between the two was Rs 16 75 crores to Rs 3 07 crores which shows the emphasis on conservation measures as five times more than that on crop-husbandry On Irrigation, the expenditure was Rs 92 crores which is about 43 6 per cent of the total About 264 thousand hectares was the achievement, rendering the cost per hectare about Rs 3,500, which is extremely reasonable The expenditure on afforestation, including pasture raising, is about Rs 30 crores which is 14 2 per cent of the total The achievement was 304 thousand hectares with per-hectare cost working out to Rs 992 It is relevant to mention that in these works, the maintenance needs to receive special emphasis The debiting of maintenance expenditure to non-plan sector creates problems here as well as elsewhere

Tribal Areas

While special attention to the tribal population was enjoined under the Constitution and various State governments have done noticeably in this direction the emergence of the Naxalite movement stressed the need for emergent action in these areas The purpose was to identify and remove the disabilities arising out of their isolation, non-monetized economy, lack of settled habits of agriculture, and the impact of an exploiting group of anti-social elements The Tribal Area Development Programmes (TADP) concentrated on the economy of the tribal population. Both the ameliorative measures in debt and land alienation possibilities, as also positive efforts for better marketing facilities for their natural forest produce considerably met the prime need of the tribal people The TADPs were also a combination of attention to a weaker segment of our society, as also to improve their

habited areas Suggestions for the starting of a "Backward Classes Development Corporation" are sometimes being made to expand and deepen the attention on tribal and other backward class economic development But this is no panacia if one takes into account the numerous corporations started in the Fifth Plan period The idea of 'labour certificates' also was mentioned in some circles This is too sophisticated for the community we are dealing with If the Certificates are not readily cashable for goods, they are infructuous: and if they are cashable, they are superfluous, taking into account the subsistence level of the economy in which the poor operate

The Fifth Plan Approach

The Fifth Plan took into account these developments in favour of the weaker sections in the community the divergence in the development of the regions in the country, and also the need for reaching a large segment of the deprived society with the required social and economic benefits. This approach needs to be analysed The model is a *static Leontief inter-industry model* with provisions made for endogenous estimates of import requirements and for redistribution of private consumption from the richer to the poorer sections of the population The consumption model takes into consideration the desired level of monthly aggregate per capita consumption for the lowest 30 per cent of the population This model is derived from the twin policies of the elimination of poverty of a large number living below the poverty level and also of the reduction of disparities in income and wealth. On the first, there are deliberate innovations in programmes and, on the second a transfer mechanism is incorporated in the mathematical model

The poverty level has been viewed in terms of the minimum level of the calorie consumption For the first time the number of persons who could be regarded as poor was estimated on the basis of consumption index (Appendix VII) About 160 million accounting for about 40 to 45 per cent were taken into account as persons living below the poverty line Their composition had a natural preponderance among the small landholders but had about 60 million who are landless agricultural labourers or artisans. Apart from the Fifth Plan estimates the recent assessment in 1978 was that the percentage of population below the poverty line in 1977–78 may be projected at 48 in rural areas, and 41 in urban areas The total number would be 290 million About 160 million fall below 75 per cent of the poverty line. It was the task from the Fifth Plan onwards to specially attack this poverty line both by public investment and by activating self-employment

Minimum Needs Programme

In order to meet this situation, a Minimum-needs Programme was also drawn up This was to meet a quantum of Social Consumption infrastructure and welfare requirements such as drinking water, education

and health of the rural population It was an attempt, on a large scale, to provide public investment for private consumption It meets some of the basic needs of the rural population The programme did not catch up very much in the Fifth Plan due to the cut-back in public expenditure as a measure for containing the inflationary pressures in the initial years, the energy crisis, the stress on full-capacity utilisation of the existing investments and the urgency of the 'core sector' But the special device of a comprehensive effort at developing the quality of life is a striking feature. The Sixth Plan, however, brought these into a realistic focus The outlay of Rs. 4,179 crores in five years (1978–83) would be feasible While the coverage in elementary education was less ambitious, the inclusion of adult education as part of this programme was appropriate A non-formal education effort for all adults between the age-group of 15–35 would create a greater awareness, and would "enable them to develop their full potentialities and play an active role in economic, social and cultural progress". The need for housing assistance instead of house-sites was recognised (for details, see Appendix VII A)

Integrated Resource Utilisation

Many programmes for target groups and area development are under active implementation It was felt that they did not form part of a unified effort to tackle the different resource endowments in any given area The inadequacy of the full exploitation of the potentialities in the area became a cause of concern Secondly, the entire technological build up behind the green and white revolutions had to have a much wider impact on the rural areas It should not stop with crop production or milk yeilds. Every other item had to receive a similar emphasis

As a strain of this, the focal theme of the 63rd session of the Science Congress held in January 1976, brought up pointedly the impact of science on rural development The general presidential address of Dr. Swaminathan highlighted the need "to review our assets and liabilities and the present state of the art of harnessing science to improve rural economy and living". From this gene, interacting with field-level problems, developed the thesis for integrated rural development

The unusual feature of 1976 budget was the presentation of the programme on Integrated Rural Development drawn up in detail. It was a thesis expounded on the needed impact of technology on the resource utilisation in the rural areas — "A systematic, scientific and integrated use of our natural resources, and, as part of this process, enabling every person to engage himself in productive and socially useful occupation and earn income that would meet at least the basic needs". An amount of Rs. 50 crores was also specifically provided for this. This involves a comprehensive production plan, a new occupational pattern, and accrual of incremental incomes to cross the poverty line. The procedure covers an intensive and exhaustive

preparation of an inventory of the resources of a given area. steps for improving agricultural productivity, rural non-farm occupations, agro-industries, and attending to welfare needs.

Twenty districts were selected for the implementation of the IRD system on a pilot basis The coordinating agencies were mostly the Agricultural Universities. with specific task allocated to individual ICAR officers The CSIR. in association with the Department of Science and Technology, Government of India which are the associates of IRD also participated in identifying projects for science and technology. Some specific plans were also prepared. It was an effort never noticed before in the drive for harnessing technology for rural development and extremely imaginative. But other wider programmes of integrated rural development enveloped this theme also

The strength of the argument of the identification of science and technology proved to be its weakness in implementation. It was a pertinent attempt "to inject science and technology in the daily life of the people" and the instruments for translating this related largely. at least in the initial stage, to the scientific personnel; for this the scientific personnel have to grow from being academic analysts to a cadre of administrators too,as part of transfer of technology, often parallel to the existing set-up The idea was not somehow integrated with the entire Fifth Plan structure, though financial allocations were made to the selected IRD districts It was more a resource harnessing exercise than a departmental project formulation with a clear financial picture, it was a process not a programme The market limitations and social constraints were also not taken into account. The ideas of generating greater employment potential and need for schemes which could be implemented through the existing departments did not harmonise fast enough with the technology-oriented IRD. But the ideas of 'integration', of total mobilisation of the endowments, and of the effect of technology in this direction were clearly established.

National Commission on Agriculture

Another important contribution to thinking on the improvement of the rural areas is the monumental report of the National Commission on Agriculture, largely piloted by Shri B Sivaraman This was a comprehensive analysis of agriculture and allied sectors, and of the action that needs to be taken to increase production and achieve social justice in the production process. The report evolved from agriculture, a rural-occupation culture consisting of agriculture, animal husbandry and dairying, piggery, poultry, fishery and farm forestry. It was a rural development therapy that emerged. They also enunciated that "our approach to agricultural development rests on the basic aim of securing for the people of the country welfare and prosperity The establishment of a prosperous and egalitarian society

requires, firstly, adequate supply of goods and services to support a rising standard of living and, secondly, sufficient employment and income opportunities for the masses which generate effective demand for these goods and services and enable them to enjoy the benefits of development"

A Fresh Look at Rural Development

The series of target programmes as also area approach programmes had given many valuable lessons The concept of rural development is snowballing with multi-laboured splendour It ranges from revivalism to renaissance, modulation to modernisation, efficiency of production to advocacy of evangelic redistribution Recreminations about the past and reiteration of the priorities of rural development for the future have occurred in the last two years But more constructively, the weakness of the earlier efforts in economic growth were analysed and government attention concentrated on the importance of the rural scene, and the betterment of their economic and living conditions By 1977, the ideology delineated measures for the removal of poverty and of providing full employment by activating rural development endeavour. Both these objectives required a fast and intensive production programme on the farm as well as outside. Further the tertiary and service sectors had also to receive adequate attention for providing employment opportunities as also to produce the required consumption goods The earlier thought of Integrated Rural Development with its accent on the scientific untilisation of all the resources. to create more employment opportunities was found to be very suitable with the content somewhat realigned The mutual interactions of several programmes and their interlinkages are being further established

Integrated Rural Development

The present integrated rural development has the unified field instead of the multipurpose approach of the CD It is not a technique but a plan of detailed action It stresses on four important types of activities One is the accent on increased production both in agriculture as also in the allied sectors such as animal husbandry, fishery, forestry and horticulture The second is the emphasis on village, cottage, handicrafts and tiny industries. The third one is on the tertiary sector which would cover artisans and the requirements of skilled workers in several rural activities The fourth is a labour mobilisation endeavour which included training in skills as also perceiving the organised mobility of labour where opportunities for employment exist

These four items are not new but have been brought together as an integral process of development and as the strategy for rural areas The guidance given for the integrated rural development indicated taking advantage of the existing programmes and unifying them In 1978–79, 2,300 blocks were to be covered by the integrated rural development Projects In

2,000 blocks the programme is superimposed on the existing efforts of spec projects. with additive financial allocation Three hundred new blocks, r covered by special programmes such as SFDA, DPAP. CAD, are also to taken up every year for a period of five years, starting from 1978–79

The effort is to further activate the attention to the poor and create grea employment opportunities Their spread in the country and the linka with on-going developmental programme can be seen from Appendix VI The programme involved the preparation of a resource inventory, househo survey, a manpower budgeting and above all introducing the people's i volvement in most of these programmes. Again, out of the 2,000 bloc mentioned above, 1,000 blocks will be ehosen for further intensification development effort beamed towards employment.

Appropriate approaches in the implementation of IRD are visible, f the uplift of the economy. Those holding an economic size would bene by the supply of inputs technology and credit. Those with uneconom holdings require a supplementation of income in subsidiary occupations suc as dairying, poultry, pisciculture, sericulture, piggery, bee-keeping, veg table growing. etc Those who are landless agricultural labourers need different approacn. A massive programme of rural crafts, supply of require raw materials, upgrading of their skills and arranging marketing of the products become relevant Thus, by intensifying the primary, secondar and tertiary sectors the coordinated effort for creating both production an employment opportunities get enhanced The primary sector concentrate on agriculture and allied products. the secondary sector on village an cottage industries and the tertiary sector on several types of 'service indus tries' It should also be noted that the integrated rural development pro gramme is not a package deal but a suggestion at the combination of th relevant activities suited to the local situation and priorities The stat governments could select for implementation those that are pertinent an also shape them suitably. This malleability is always needed. The weake sections have, however, to be given special attention uniformally in an alternative chosen.

Antyodaya

While one of the objectives of the integrated rural development is to in crease the employment potential with speeial attention to the weaker sections an individualised concentrated attention is also on way in the programme o *Antyodaya* This programme aims at the upliftment of the poorest man i the village Under this programme. at least five poor families are identified either for group or individual assistance Identification, is done on the basis of the absence of any earning member in the family, low income level, even if they are earning members, inadequate assets for a reasonable living and the like in a particular gradation There are different programmes including old

age and disability pension, land allotment, provision for credit and other inputs, assistance for agricultural and allied activities, self-employment programmes and cottage industry programmes In Rajasthan, about 1 6 lakh families have been identified as deserving assistance, about 1.4 lakhs have already been covered, the largest number (43 per cent) received credit assistance and the next highest beneficiaries get land allotment (30 per cent) There are at least 17 per cent who have to be given old age pension. In Bihar, about 1.5 lakhs have been identified in 30,000 villages, in Himachal Pradesh about 80,000 families comprising 95 per cent of the deserving families have already been benefited. The programme is catching of in U.P., Orissa and other states Similar programmes like the Employment Guarantee Scheme in Maharashtra are under active contemplation in some states.

Food for Work Programme

As part of the effort for employment generation, and particularly to look after the landless agricultural labour, the "Food for Work Programme" was designed since April, 1977, to provide avenues of employment; besides, it contributes to the maintenance of public works, and utilisation of surplus foodgrain stocks. This programme is supported by Government of India with foodgrains, to create opportunities for productive avocations, sufficient at least for 120 days of work, which would be the off-season for the labour-draw in agricultural activities. All items of creation of new assets or maintenance - of plan and non-plan - could be taken up under this activity The cash component that is needed for the purchase of any material will be met from the state government resources It is a recognition that instead of the total preoccupation with efficient use of scarce capital the vast unskilled population should rendered into "capital". It is here that a vast rural works programme comes into picture The programme at present is anti-inflationary, uses the accumulated food reserves, contributes to the manpower utilisation, touches those really in need of food and is a much needed supplement particularly to the maintenance of the works already constructed Just at present, the supervision seems to be inadequate and a suitable system of monitoring is yet to be devised, deficiencies in the quality of food distributed for this purpose, the timelag in its supply, as also inefficient synchronisation with other plan and non-plan items of work are some of the pointers for remedy. In 1978-79, about Rs 100 crores worth of grains were released to states for this work. In 1979-80, the total cost of foodgrains to be released is expected to be about Rs 200 crores. In 1978-79 it is estimated that 541 lakh man-days of employment was created

Agricultural Credit

One of the most important inputs for improving the rural economy through increase in production is the flow of the necessary credit as supplemental to farmers' resources. For all the success of the special projects and

IRD, this is the life breath. There is much experience in different phases and immense activity in improving the modalities for flow of short, medium and long-term loans, as also of increasing the quantum. Only a brief reference could be made here. While the total requirement has yet to be met the flow of short-term credit has at least reached somewhere near the targeted level of the Fifth Plan though the medium and long-term loans are still falling short of the target In 1977-78, the total of medium and long-term is but approximately one-third of the level of the short-term which is at Rs 1,200 crores (see details in Appendix IX). The active functioning of the several special programmes require that 75 per cent of the credit should come through institutionalised sources. This sector has therefore drawn up new paths Orientation of the commercial banking to induct credit into the rural development system is a definite step forward. Between April, 1976, and March, 1977 these have advanced about Rs. 138 crores by way of short-term loans. This would be one-third of the total institutional credit in this sector during this period. It is further proposed that the proportion should be raised to a minimum level of 50 per cent, in areas covered by SFDA/MFAL programmes the exhortation is that the percentage should be proportionately higher. About 62,000 villages have been so far adopted by 21 Scheduled banks Another important step is the constitution of the regional rural banks which are supplementing the cooperative credit considerably since the ethos of these banks is only for concentrating on the rural areas Not only are their operations completely development oriented for rural areas but their performance to improve on the loan deposit proportion is striking.

The National Commission on Agriculture had gone into the credit requirement in sufficient detail It has noticed that the impact of both cooperative lending and commercial lending did not meet even 40 per cent of the estimated requirements of rural credit The total credit requirements for the rural sector were estimated at Rs 16,550 crores by 1955. The credit requirements that could possibly be met should be placed around 9,400 crores by 1985 Further, activisation of the cooperative system, the commercial banking as also regional rural banking network will be absolutely essential for this purpose. In the wake of some of their suggestions, farmers service cooperative societies which are designed primarily for meeting the credit requirements of the weaker sections and large-scale multipurpose cooperative societies (LSMPS) for certain areas, have also been introduced Most of the integrated rural development programmes which are farmer and individual oriented both in meeting the production and also for creating employment are dependant upon the supply of adequate credit Attention to individual families and a clear analysis and access to the different types of credit would be needed. The problems of supervision can partly be met by assigning manageable areas to individual institutions and societies A greater linkage of the other

inputs including minor irrigation with agricultural credit is on the way in the tie-ups that have been achieved in the different types of functions in the cooperative institutions/credit and service cooperatives

The Development Theme for Rural Areas

One may analyse as some have done, the approaches to rural development as "technocratic", "reformist and radical" or "collectivist" But a choice from this cuisine, as courses, than as a pot-pouri, is now on the plate. The total perspective of rural development now has several components : the maximisation of production in agriculture and allied activities in the rural areas including the development of rural industries, the generation of employment opportunities in rural areas specially for the weaker sections of the community, the provision of basic amenities such as drinking water, health, education, link roads, village market centres and rural godowns The attempt is for the full utilisation of the productive capacities of the rural poor, of the endowments in the rural areas, of constantly keeping in view the need for egalitarianism The concept is based on the theme that as the income of the poor rises, through the production of labour-intensive goods, in the farm as also outside the farm, the total national development will be accelerated simultaneously achieving social justice As economic and commercial activities in the rural areas get strengthened tending to the growth of trans-village transactions, the linkages with semi-urban centres will also develop, thus providing the needed rural-urban continuum.

The New Direction in the Plan

The need for appropriately locating all these special programmes in their respective locales on the field, the induction of production plans, the acceleration of the employment generation schemes, as also the supply of the basic needs of the rural population demand that the plan formulation and implementation strategy should be more rural oriented Along with this orientation, the model and the methodology of planning itself will undergo a change In the First Five-year Plan the main objective was the rehabilitation of the economy from the plight of the pre-independence days and also the difficulties it got into after the partition The agriculture policy, the community development and the industrialisation had to create a new infrastructure in relation to future needs The level of savings as determined by the difference between the marginal and the average rate of savings set the limit to the magnitude of capital formation, maximisation of the current rate of growth through a planned difference between these two in a general way was the theme In the Second Plan it was noticed that the capital formation depended not merely on savings but also on the capacity to produce capital goods The investment pattern changed Naturally, the heavy industries got considerable emphasis The Third Plan almost continued the same theme. But the limits for the investments on capital goods were noticed;

the choice of capital goods–consumer goods as against capital–producing goods – was clear. There was also the anxiety for a self-sustained economic growth. In the Fourth Plan the need for social infrastructure was getting recognised: the importance of agricultural production and a much greater input for this sector was very visible. It is only in the Fifth Plan that two strains of thought relevant for rural development were evolved, one is the anxiety to meet the minimum requirements of the vast rural population and the other to see that the poverty level does not increase, they were to be tackled squarely instead of depending on fall-out benefits. Both these were done with a back-drop of improving the needed agricultural infrastructure in irrigation and power.

The Sixth Plan is deriving its strength from clearly conceptualising the efforts possible for rural areas Both in regard to the total investment as also in the production pattern that it visualises, as in the handloom sector, it struck a decisive pattern Increase in production from the rural areas and amelioration of poverty are the two themes in the strategy and objectives. A water-seed-fertiliser syndrome is nowadays accepted by the farmer. The supplies have to be streamlined; the farmers economy has to be made viable The full employment opportunities have to be created to remove unemployment and significant under-employment.

Block Plans

This perception of the need for preparing "Block Plans" for effectively developing these programmes for rural development, appropriate to the area is a feature of the Sixth Plan. It would appear that the state Plan formulation would in future be based on the block/district Plans thus drawn up It is now realised that unless the required type of programmes for rural development are planned on a small area, such as for a block, the modalities for accelerated effort for meeting the problems of rural development will not be charted The several area and target group programmes, the employment opportunities, the accelerated production programmes supported by the required physical and financial inputs, and the minimum-needs programmes had all to be woven together on a given small area, the block plan concept is now being given a great emphasis The block plan naturally has to contain all the projects of the integrated rural development, the state-level items and the several sectoral projects touching on rural welfare activities It has to plan for an employment generating system as also the utilisation of all public infrastructure. The projects for this purpose will have to be location-specific. In this exercise, the trend of avoiding income disparities is a salient feature.

In drawing up the Fifth Plan also, the multi-level planning aspect was very much emphasised, even from the stage of developing the 'Approach', this feature was underscored. But not much progress could be seen due to

a number of other factors affecting the national plan formulation But guidance was given for preparing district plans. Planning machinery at the states' level was being reorganised and strengthened by Centre's financial participation, in the set-up Both the paucity of the techniques, and the weakness in conceptualising area-level-improvement in the national context, threw up a compilation of all the visualised needs as a district plan Generally, the attempts ended up in a disaggregation of the State Plan allocations district-wise but department-wise. Recently the technical support needed at the district level, and the process of formulation of the block plans were ably dealt with by the Dantwala Committee.

The Block Plan remedies this situation. Unless all the programmes are reduced to a spatial level and the projects appropriately included as a part of the block plan, and a strict sequencing of activities is drawn up, keeping in view all the predilections of the departments' self preservation a well conceived and well harmonised rural plan of action will become difficult. If some lag and even if some departments do very well, digestive troubles for the farmer will start The block plans seems to be pre-requisite for IRD and, therefore, their preparation proceed faster than estimated at present. It is true that there is shortage of personnel equipped to prepare the block plans. Training of the required talent for such work, at ptesent, is as important as looking after the weaker sections of the society.

Pointers

Any reiteration of the message of rural development would be infructuous unless the several pre-requisites for implementing the present programme are noted and remedial innovations made. Otherwise the usual shortfall in targets will occur Simultaneously, we should also avoid the psychosomatic fault finding

Unision of Activity Needed Firstly, it will have to be admitted that, neither at the Centre, nor in the states, lare the respective ministries/departments dealing with all the aspects of rural development structurally integrated They may collaborate, and in idyllic situations act in unision, but they are not as yet integrated enough in the formulation or implementing the programmes They can hardly pass on the synthesised effort from the headquarters down to the field It is ofcourse true that a unitariness is somewhat difficult

It should however be noticed that integrated rural development will have to be a vertical as also a horizontal integration of projects But the departmental compartmentalisation has not yet vaned The IRD projects are often that of one department, the special programmes for weaker sections that of another and possibly agricuture and allied activities are that of a third department At the state level, a group-force of secretaries might be adequate for achieving collaboration. Meshing and sequencing of

activities at the local ground level will not work so harmoniously. The future of administration is in coordination efficiency of achievement will be in achieving the targets that fit into the total project A synchronisation machinery, with adequate monitoring capabilities of all the components of the programme will have to be devised In this regard special attention is needed to the field-level functioning while many programmes are being developed with thought and care it will have to be admitted that there is no agency at the field level which can really take care of the overall implementation The several components of development or the inputs required by the farmer have to be put together by the respective government delivery agents

Administration at Block Level Thirdly, it is necessary to have a further look at the administrative set up at the block level Either at the growth centre level, or at mandal panchayat level or, at block level, considerable strengthening is needed The staff at the block is now inadequate for the purposes that we have in view. Technical competence will have to travel downwards from district In some states, the Training and Visit System of extention has brought most of the village-level workers under the Agricultural Department There is no one who can take stock of individual household requirements of employment, prepare a viable mix for activities for the small farmer or take stock of the total labour alternatives and their deployment The other departments have not placed any of their staff under the BDO either But as the major stock-holder—the Agricultural Department—in the block has pulled out, others naturally will resort to the hedging operations with some vigour Attention is needed to an organisational set-up at the lower level, both to improve the administrative culture as also to activate the participative process of the people The talks of rural development are dependant on both these requisites The present weakness is that for want of any such local organisation and with inroads of the vertical controls of various schemes, the block-level organisation has become effete On occasions, it is often only a "bandhobust" agency.

It looks necessary that the administrative structure dealing with development at the rural area, need have one supervisory agency, preferably an elected body such as the panchayat, while the projects be executed by the competent technical personnel working under them Unless control over the bureaucracy at a horizontal level is established the fissiparous tendency in the implementation of development projects can hardly be avoided That the horizontal command of a district or lower level panchayat would come into conflict with the vertical departmental control is well known For the avoidance of such difficulties, a number of suggestions are already existing

The devise of a structure, such as the mandal panchayat, for an area, will be functional necessity and a technical prerequisite The micro plan on a spatial dimension will have to be developed with all the activities clearly

charted out and synchronized in particular type of projects such as the dairy, fishery, sericulture, land development under DPAP, water management of an outlet under CAD, commodity development, Training and Visit System. The type of programme, the area which it will benefit, and the support it needs have to be gone into in greater depth An indepth analysis of the different activities will define the role of different agencies and a time determination in their work Global programmes have to be brought down to smaller manageable and functional areas If in a cluster of villages or for a given population all the programme activities do not synchronize in harmony and as a stream, the IRD will only be a rechauffe of old platitudes. The field has to determine the projects

Peoples' Participative Process Fourthly, peoples' participation has to be reiterated In most of the present rural development strategies, the element of the peoples' involvement is still left a shade nebulous. A special effort with lessons from the past is now needed Peoples' participation on an institutionalised basis, through elected representatives, was very much advocated and implemented by the states in the sixties. The panchayati raj movement was a significant contribution to the Indian polity But this gradually wanted with a shift in the overall behaviour of the entire monolythical political system in the country. The causes have been much analysed: The apathy of the political executive at the state level to have nothing but a surrogate leadership of theirs at the lower levels, the ineptitude of the administrative hierarchy to dovetail their target-oriented line-hierarchy-ridden methods with a horizontal peoples' decision-making set-up, and above all, the inexperience of the elected representatives to effectively wield the power for only developmental tasks, all contributed to the ' disuse" into which the panchayati *raj system fell* Politicisation, ofcourse, could take place as a part of the process of participation. But a better system which can be widely replicated is yet to be devised for active participation of the people in their own development destiny Supplementation of group organisations, functional associations and voluntary efforts should take place, but can hardly totally substitute. This aspect should be recongnised as part of any attempt to improve the rural areas

External Factors Fifthly, rural development would also be dependant upon a number of external factors emanating at the national and state level. Agricultural commodities pricing-policy requires a constant review with reference to the production, fiscal and monetary equilibrium of the country The technology thrust is making agriculture a comparatively highcost one, by Indian standards, compared with the past. The yield rates have to compensate for the increase in investment. The situations are still too many where a small holding is more like an unemployment insurance, than a means of livelihood It would, therefore, be necessary to cushion the agricultural prices from the market vagaries not always by price increases but by a

suitable marketing mechanism The development of a marketing system is thus very crucial for rural areas Further, a multiplicity of projects, depending on the ethos and innovativeness of each department will have to be avoided, correctives to on-going projects will be more fetching than any midstream new items, a stability of a project for a sufficiently long period is imperative This will also develop coordination among different activities more by habit than by volition. The rural transformation to be aimed at is the growth of an egalitarian agro-industrial society with more employment and less poverty. This theme requires that the wheels of all efforts should move together, one with the other, as in an integral factory.

HELPFUL CONSULTANCY

1 Mukerji B , *Community Development in India*

2 *Report of the Nationol Commission on Agriculture.* Ministry of Agriculture & Irrigation, Government of India, New Delhi, Vol I and II, 1976.

3. *Report on India's Food Crisis & Steps to Meet It*, Ford Foundation, 1959

4. *Report on the F A O . S I D A . D S E*, Inter-Regional Symposium on Integrated Rural Development, F A O , Rome, 1978.

5. Report of the Working Group on Block-level Planning, Planning Commission, Government of India, New Delhi, 1978

6 Report of the Committee on Panchayati Raj Institutions, Ministry of Agriculture & Irrigation, Department of Rural Development, Government of India, New Delhi, August, 1978

Appendix I

OUTLAY ON AGRICULTURE & ALLIED SECTORS AND COMMUNITY DEVELOPMENT DURING DIFFERENT PLAN PERIODS

Category	1956–61 Second Plan		1961–66 Third Plan		1966–69 Three annual Plans	1969–74 Fourth Plan		1974–79 Fifth Plan	1979–83 Sixth Plan
	State	All India	State	All India	All India	State	All India	All India	All India
1 Agriculture and allied (Rs cr.)	470 71	529.00	941 39	1,090 21	1,166 60*	1,425 51	2,728 20	3,109 00	5,800 00
1.1 C D and Panchayats (Rs cr)	192 04	218 73	310 13	322 47	99 40*	92 04	115 50	127 00	150 00
1 1 as % of 1(%)	40 80	41 30	32 94	29 60	8 52	6 46	4 23	4 08	2 59

* Expenditure

Sources. (a) III Plan, p 85
(b) IV Plan, p 65, 186
(c) VI Plan, P. 20

Appendix II

CUMULATIVE PHYSICAL ACHIEVEMENTS UNDER THE C. D. BLOCKS IN INDIA UP TO 1961-66**

1	*Agriculture*	
	(a) Quantity of chemical fertilizers distributed	1,11,698,90 (in quintals)
	(b) Improved Seeds distributed	47,42,310 (in quintals)
	(c) Improved Agricultural Implements distributed	28,00,927 (in numbers)
	(d) Number of Agricultural Demostrations held	1,04,49,500 (in numbers)
	(e) Number of compost pits dug	1,95,17,500 (in numbers)
2	*Animal Husbandry*	
	(a) Improved animals supplied	1,28,776
	(b) Improved birds supplied	19,44,684
	(c) Number of animals castrated	1,37,52,500
3	*Social Education*	
	(a) Number of adult literacy centres functioning	2,61,695 (in numbers)
	(b) Number of adults made literate	63,53,622
	(c) Number of youth and farmers clubs started (The number of youth clubs as in 1974-75 was only around 91,000 This figure is vastly different from the figure given, the reason being the figure 9,97,107 includes not only the youth clubs that have been established but also the farmers clubs Hence the discrepancy)	9,97,107
	(d) Number of Mahila Mandals (This again is differing from the figure for 1974-75 which is 56,000 It is just possible that this discrepancy is because of the fact that quite a few Mahila Mandals might have come to be started under the C D impetus at that time which later became defunct and hence went out of reckoning)	78,867
4	*Health and Sanitation*	
	(a) Number of drinking water wells constructed	2,81,906
	(b) Number of drinking water wells renovated	3,82,636
	(c) Number of kutcha road length constructed (in miles)	1,49,122
	(d) Existing kutcha road length improved (in miles)	1,78,362
	(e) Number of culverts constructed	1,39,389
5	*Village and Small Industries*	
	(a) Number of Amber charkas introduced	70,622
	(b) Number of brick kilns started	50 239
	(c) Number of sewing machines distributed in the rural areas	25,517

** Source Annual Reports of the Department of Community Development for the years up to 1961-62

Appendix II — (*Contd*)

(d)	Number of new tannery pits started in the rural areas		11,406
(e)	Improved oil ghanis introduced		5,122
(f)	Number of beehives introduced		62,395
(g)	Value of improved tools and appliances distributed to artisans		
	i) Blacksmiths	Rs	15,64,068
	ii) Carpenters	Rs	14,14,003
6	*Cooperation**		
(a)	Number of primary agricultural credit societies		2,15 000
(b)	Percentage of villages covered		79
(c)	Membership		1,95,60,000
(d)	Percentage of Agricultural Population covered		34

* *Source*, Highlights of the C D Programme, July, 1963, Community Development and Cooperation (Administrative Intelligence Uuit), Government of India, New Delhi

Appendix III
IMPORTS OF CEREALS (1947-73)

Year	Import of Cereals (In Million Tonnes)	Amount (in Million Rupees)	Year	Imports of Cereals (in Million Tonnes)	Amount (in Million Rupees)
1947	2 4	939 9	1961	3 5	1,295 6
1948	2 9	1,297 2	1962	3 6	1,410 9
1949	3 8	1,446 0	1963	4 6	1,836 0
1950	2 2	806 0	1964	6 3	2,662 5
1951	4 8	2,167 9	1965	7 5	2,903 2
1952	3 9	2,090 7	1966	10 4	5,231 3@
1953	2 0	859 5	1967	8 7	5,321 6@
1954	0 8	485 3	1968	5 7	3,612 0@
1955	0 7	331 1	1969	3 9	2,530 1@
1956	1 4	563 4	1970	3 6	2,075 5@
1957	3.6	1,623 9	1971	2 1	1,234 6@
1958	3 2	1,205 1	1972+	0 8	N A
1959	3 9	1,414 1	1973	3 6	N A
1960	5 1	1,928 4			

\+ relates to 1972–73

@ The relatively high value of imports is due to the devaluation of the rupee on June 6, 1966

Source . 1) Bulletin on Food Statistics 1972, Directorate of Economics and Statistics, p 97

2) Economic Survey 1973–74, Government of India, New Delhi

Appendix IV

PROGRAMMES FOR PRODUCTION AND SPECIAL PROBLEMS

S No	Name of the Programme	Year of Commencement	Coverage	Remarks
(1)	(2)	(3)	(4)	(5)
	Production oriented projects *Agriculture Food Crops*			
1	Intensive Agricultural District Programme (IADP)	1960	37 districts in 14 States (1977)	1960–63 first phase seven districts, Second phase 1963–64 12 more districts, 12 districts subsequently
2	Intensive Agricultural Area Programme (IAAP)	1964–65	117 districts spread over 1,596 Blocks (1965–66) Later on extended to 150 districts	—
3	High-yielding Varieties Programme (HYVP)	1963–64	—	37 million hectares (1977–78) and 40 million target fixed for (1978–79)
4.	National Demonstration Programme	1965	—	3,158 field days organised and attended by 80,000 farmers (1977)
5	Farmers Training & Education Programme	1966	100 Farmers Training Centres opened in 20 States and 4 Union Territories (1971–72)	—
6	Multiple Cropping Programme	1967–68	55 Projects were started in 17 States and one Union Territory (1971–72) the Programme was discontinued Sector but it continued under State Seetor	169 millon hectares gross cropped area (1974) target of 180 million hectares fixed by (1978–79)
7	Commodity oriented			
	a) Tobacco	1971–72	19 districts	67,098 hectares covered till (1977–78)
	b) Sugarcane/Sugerbeet	1967—1970–71	—	3 7 lakh hectares covered by (1977–78)

Appendix IV—(*Contd*)

(1)	(2)	(3)	(4)	(5)
	c) Cotton	1971–72	23 districts in 9 States	71.0 million tonnes produced by (1977–78)
	d) Jute/Mesta	1972–73	7 districts in 5 States now extended to 12 more districts.	Covered 3 94 lakh hectares by (1977–78)
	e) Oilseeds	1974	—	Produced 95 3 million tonnes by (1977–78)
	f) Fruit Crops	1974–75	Fifth Plan target to achieve 102 lakh tonnes per annum	—
	Animal Hunbandry			
8	Instensive Cattle Development Programme (ICDP)	1964–65	76 Projects in 17 States (1975–76) target of total 14 such projects in 20 States by the end of (1978–79)	—
	Area Programmes Oriented towards Weaker Sections and Disparities.			
9	Drought Prone Area Programme (DPAP)	1970	74 districts and 532 blocks in 13 States	Fifth Plan target was to spend Rs 181 crores but Rs 155 crores spent by January (1978)
10	Pilot Projects for Integrated Development of Dryland Agrilulture	1970–71	24 Pilot Projects in 12 States	—
11	Tribal Area Development Programme (TADP)	1971–72	8 Projects spread over 4 districts and 46 Blocks in 4 States	Out of 4 75 lakh tribal participants 335, 533 participants benefited and Rs 1,427 29 lakhs released (1978)
12	Hill Area Development Programme (HADP)	1972–73	3 Projects covering 20 blocks in 2 States	Amount released Rs 172 34 lakhs by (1977–78) Rs 121.90 lakhs spent by (1977)
13	Command Area Development Programmes (CADP)	1974	Fifth Plan target was to cover 51 Projects in 21 States but at present covered 37 CADA spread over 47 irrigation projects in 102 districts and 972 blocks in 12 States	Covered about 15 million hectares during Fifth Plan period

Appendix IV—(*Contd*)

(1)	(2)	(3)	(4)	(5)
14	Whole Village Development Programme	1974–75	38 villages spread over 4 States	Rs 12 35 lakhs released so far a sum of Rs 50 lakhs outlay for the year (1977–78)
15.	Integrated Rural Development (IRD)	1976	700 blocks (1978) in the country.	—
16	Desert Development Programme	1977	19 districts and 125 blocks in 5 States	Rs 6 10 crores allocated by (1977–78)
	Target-Group Oriented Programmes			
17.	Small and Marginal Farmers, Agricultural Labourers Development Agencies (SMFAL)	1970	168 projects spread over 1,807 blocks and 200 districts in 22 States and 3 Union Territories	146 64 lakh beneficiaries identified 62 18 lakhs enrolled as members of cooperatives Rs 20155 8 lakhs short term Rs 7501 98 lakhs as medium term Rs 10524 75 lakhs as long term
	Fish Farmers Agencies			Loans disbursed through cooperatives Rs. 2291 24 lakhs short term Rs 7692 92 lakhs medium-term loan disbursed by Commercial Banks (1977–78) Amount released Rs 15774 89 lakhs Amount utilised Rs 15354 11 lakhs (1977–78)

Appendix V

PROGRESS OF S.F.D.A PROJECTS DURING IV PLAN, V PLAN UP TO SEPTEMBER, 1978 AND SINCE INCEPTION

Programme	Up to to end of IV Plan	1978–79 up to November 1978	Total during V plan up to November 1978	Since inception (Col.2+4)
(1)	(2)	(3)	(4)	(5)
1. No of participants identified (in lakhs)	39 27	14 58	121 86	161 13
2. No. enrolled as members of Coops (lakhs)	19 56	8 71	51 34	70 90
3 No. of beneficiaries under (in lakhs)				
i. Minor Irrigation	1.72	0 57	5 44	7 16
ii Milch Cattle Programme	0.78	0.62	3 65	4 43
iii Poultry	0.08	0 02	0.10	0 18
iv. Other A H. Programme	0 25	0 21	1.73	1 98
v. Rural Artisans Programme	0.02	—	0 04	0 12
vi. Rural Works Programme	2 25	—	0 58	2 83
vii Improved Agriculture	11 27	6 18	39 80	51 07
4 Loans disbursed (Rs. in lakhs)				
(a) *Through Cooperatives*				
i Short Term	—	3,152 46	—	—
ii Medium Term	1,617 51	1,149 59	7,034 04	8,651 55
iii. Long Term	3,517 56	918 43	7,925 62	11,443 18
(b) *Through Commercial Banks*.				
i. Short Term	—	330 80	—	—
ii Term Loan	1,064 52	1,651 03	8,279 44	9,343 96
5. Amount Released (Rs in lakhs)	4,683 89	1,911 81	3,002 81	17,686 70
6 Amount Utilised (Rs in lakhs)	4,170 59	1,840 24	12,882 97	17,053 56

Appendix VI

SECTOR-WISE EXPENDITURE UNDER D.P.A.P. DURING THE V PLAN PERIOD

(*Rs in lakhs*)

Sector	Vth Plan Outlay	1974–75 expenditure	1975–76 expenditure	1976–77 expenditure	1977–78 expenditure	1978–79 expenditure till Dec 78	Total expenditure since inception of the project	% utilisation
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 Agriculture	5,808 73	532 80	475 64	854 53	932 35	709 76	3,507.08	60.38
2. Irrigation	10,894 54	1,467 54	1,720.32	2,516 33	2,294 76	1,206 23	9,205 18	84 49
3 Afforestation	3,762.51	397.48	467 93	753.37	892 66	503 56	3,015 00	80.13
4 Animal Husbandry	4,312.94	161 95	303 42	717.98	1,298 39	520.65	3,002 39	69.61
5. Sericulture	229 34	—	8 33	33 80	62 08	27.09	131.30	57.25
6. Horticulture	343 95	16.36	30.84	43 61	54.17	—	144.98	42 15
7 Fisheries	368.28	15 23	50 70	57.98	61 92	30.42	216 25	58 72
8 Drinking Water Supply	350 50	75 47	47 01	53 46	57 07	—	233 01	66.48
9 Credit Mng	394.94	4 31	45 18	49 23	102.59	—	201 31	50 97
10. O & M	866 16	13.55	70 54	164.19	168 64	—	416 92	48 13
11. Power	659.00	—	—	244.40	12 62	—	257.02	39.00
12. Apiculture	10 00	—	1.05	5 06	2.23	—	8 34	83.40
13. SFDA Facilities	305 66	—	—	118 00	37.23	—	155 23	50.79
14. Mandies	27.60	—	0 10	6.00	3 00	—	9 10	32 97
15 Lack Dev	—	0 57	218 00	—	14 24	—	232 81	—
16 Uncommitted	2,744 37	—	2.68	0 46	4 22	371 92	379.28	13 82
17. Others	195.10	—	—	—	0 77	—	0.77	0 39
18. Land Records	13 78	—	—	—	—	—	—	—
19. Monitoring	7.00	—	—	—	3 59	—	3.59	51 29
Total	31,294.35	2,685.26	3,441.74	5,618 40	6,004.53	3,369.63	21,119.56	67.19

Appendix VI A
STATEMENT SHOWING PHYSICAL ACHIEVEMENTS OF MAJOR ACTIVITIES UNDER D. P. A. P.

Sector	Cumulative achievements during Fifth Plan (1974-1978)	Achivements during 1978-79 (April 1978 to December 1978)
1 Soil & Moisture Conservation (000 Hectares)	1,076	171
2 Creation of Irrigation Potential (000 Hectares)	230	34
3 Afforestation and Social Forestry (000 Hectares)	171	62 (items 3 & 4)
4 Pasture Development (000 Hectares)	71	
5 Distribution of Milch Animal (000 No)	37	11
6 Organisation of Milk Producers Cooperrtive Societies (No)	2202	485
7 Organisation of Sheep Cooperative Societies (No)	515	142

Note Year-wise break-up of cumulative achievements during the period 1974-78 is not readily available as proforma for the year 1977-78 was different from the previous years Hence cumulative total given for the Fifth Plan period 1974-78 will not tally with the year-wise figures, received from the projects Moreover, figures for the earlier years have undergone revision as given in the cumulative figures supplied by the projects

Source Ministry of Agriculture

Appendix VII
COMPOSITION OF THE RURAL POOR

While the poverty line is drawn at private consumption of Rs 240/- at (1960-61 prices) per capita per year by the study group of the Planning Commission, the abject poverty line is defined as the level corresponding to Rs 200/-

It is estimated that 164 million people were below the abject poverty line in 1960-61 The composition of this group of people is as follows

1	Agricultural Labour Population (with or without land)	50 million
2	Non-agricltural Rural Labour (mostly artisans)	10 million
3	Land operating (non-labour) households below 5 acres (in the four lowest size class of household operational holdings) (a) up to 0 49, (b) 50 - 99, (c) 1 00 - 2 49, (d) 2 50 - 4 99	85 million
4	Small Landowners (who, for one reason or the other do not operate their own land in the size class above 5 acres of household operational holdings)	15 million
	Total	160 million

(Details of the composition not available for the remaining 4 million)

The above information is based on the following source

B S Minhas, "Rural Poverty, Land Redistribution and Development Strategy; Facts", SANKHYA, The Indian Journal of Statistics, Series C, Vol 36, Parts 2 & 4, June and December 1974, p 252

Appendix VII A

FIFTH PLAN AND REVISED MINIMUM NEEDS NORMS

Head	Fifth Plan Norms	Revised Norms achievable by 1988	
(1)	(2)	(3)	(4)
Elementary Education	Coverage of 97% of children in age-group 6–11 and 47% of children in age group 11–14	100% coverage of children in age-group 6–14 (90% coverage by 1983) Half of additional enrolment in the non-formal system.	32 million children.
Adult Education	—	Coverage of adults in age-group 15–35 Coverage in next five years to be determined on the basis of field experience and suitably enlarged.	To make 66 million literate out of about 100 million adult illiterates in the age group 15–35
Rural Health	Establishment of one PHC each community development block Establishment of one sub-centre for every 10,000 population Provision of drugs@ Rs 12,000 per annum for each PHC and Rs 2,000 per annum for each sub-centre	Establishment of one PHC for every 50,000 population and one sub-centre for every 5,000 population One community health worker in each village	One Public Health Centre for every 1,00,000 population.
Rural Water Supply	Coverage of all the problem villages	Coverage of all leftover problem villages by 1983.	To all the one lakh villages lacking in safe drinking water supply.
Rural Roads	Linking up of all villages with a population of 1,500 or more.	Linkink up of all villages with a population of 1,000 or more	About half of the total required of the villages with population of 1,000 to 1,500 would be linked by roads
Rural Electrification	Assistance to only those States which have not achieved 40% coverage by the end of Fourth Plan.	Coverage of 50% of villages in each State and Union Territory	40 000 villages to be electrified by 1982–83 (This will bring the coverage to 50 per cent of the total required

Appendix VII A — (*Contd*)

(1)	(2)	(3)	(4)
Sites and other help for housing landless rural labour households	Provision of nearly 4 million house-sites	Provision of housing assistance to all rural landless labour households	i 8 million landless workers will be provided developed plots ii Drinking water source for every 30 houses iii 13 million slum dwellers will be covered leaving about 18 million to be covered in the subsequent plan
Environmental improvement of urban slums	Financial assistance two States for (a) Expansion of water supply, (b) sewerage, (c) paving of streets and (d) provision of community latrines in slum areas which are not likely to be cleared within next 10 years, but are amenable to improvement The scheme will be extended to all towns with a population of 3 lakhs and above Where a town of this size does not exist one town from each such State would be covered Areas inhabited by scheduled castes, particularly scavengers, etc should be given due priority	Environmental improvement comprehending (a) expansion of water supply, (b) sewerage, (c) paving of sreets and (d) provision of community latrines in slum areas Areas inhabited by scheduled castes, particular scavengers etc, should be given due priority	

Nutrition	1 Mid-day meals for children in age-group 6–11 years.	1. Mid-day meals for one-fourth of children in age group 6–11 years	1. 2 6 million under-nourished children.
	2 Supplementary feeding programme for children in the age-group 0–6, pregnant women and lactating mothers in tribal areas, urban slums and chronically drought-prone areas.	2 Supplementary feeding programme for under-nourished children in the age group 0-6, pregnant women and nursing mothers in blocks with high concentration of schedulad castes and tribes.	2. 4 million children for mid-day meals

APPENDIX VIII
DISTRIBUTION OF BLOCKS UNDER CADP/DPAP/SFDA AND IRD

State/Union Territory	Total No of Blocks	Number of blocks covered under				IRD Blocks under				IRD Blocks (Area Planning) 1978–79 (Non-SFDA/DPAP/CADP)	IRDP (10+11)
		CADP	DPAP	SFDA	Total	CADP	DPAP	SFDA	Total 7+8+9		
1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh	324	74	72	134	220	45	43	80	168	6	174
Assam	134	7	—	58	65	4	—	35	39	15	54
Bihar	587	213	57	236	506	128	34	142	304	6	310
Gujarat	218	32	41	86	159	19	25	52	96	4	100
Haryana	87	22	12	32	66	13	7	19	39	6	48
Himachal Pradesh	69	—	—	18	18	—	—	11	11	18	29
Jammu & Kashmir	75	14	12	46	62	3	7	28	38	2	40
Karnataka	175	34	42	66	142	20	25	40	85	6	91
Kerala	144	17	—	58	75	10	—	35	45	13	58
Madhya Pradesh	458	36	42	131	209	22	25	79	126	58	184
Maharashtra	296	42	33	118	193	25	20	71	116	11	127
Manipur	26	1	—	7	8	1	—	4	5	6	11
Meghalaya	24	—	—	12	12	—	—	7	7	3	10
Nagaland	21	—	—	21	21	—	—	13	13	—	13
Orissa	314	50	25	115	190	30	15	69	114	13	127
Punjab	117	—	—	76	76	—	—	46	46	10	56
Rajasthan	232	17	78	76	171	10	47	46	103	9	112

Appendix IX

INSTITUTIONAL CREDIT FOR AGRICULTURAL DEVELOPMENT

(*Rs in crores*)

	Fifth Plan targets	Achievements (1974–75)	Achievements (1975–76)	Achievements (1976–77)	Achievements (1977–78) (Estimated)
Cooperatives					
Short term	1,300 (level)	783	918	1,062	1,190 00
Medium term	325 (cumulative)	118	102	149	150 00
Long-term loans	1,500 (cumulative)	184	215	278	220 00
Scheduled Commercial Banks					
Short term	400 (level)	146 10	212.50	315*	390 00*
Term loans	575 (cumulative)	128 20	192 40	250*	380 00*

*Estimated

Source · Ministry of Agriculture & Irrigation (Department of Rural Development).

CONSPECTUS OF RURAL DEVELOPMENT

S K Rau

1. The enunciation that develpoment should take place with social justice is a shift in the economic growth policy in India Production increases, even noticeable, could not have the needed effect on the levels of living of the poorer sections of the rural areas. The percolation effect did not take place as this segment of society was not either as yet porous, or was too distant for any trickle down effect The numbers in absolute poverty, therefore, did not decrease, though some national economic growth was perceivable, those that crossed the poverty line were not many as compared with those left behind This situation required far more intensive efforts to concentrate directly on this target group with a number of special measures

The primary concern is for the betterment of the entire rural area It is a reiteration that 80 per cent of the population living in rural areas should get a larger share of benefits of development. This reoriented the planning process itself to tackle the dual perplexity of production in general, along with adequate gains to weaker individuals, both in participation as also in yields. The complexity of the problem arises out of the fact that while growth in production, has to be sustained the poorer sections should simultaneously be brought into the stream of increased production simultaneously improving their viability

With the birth rate at 33 per thousand and the population growth rate of 1.9 per cent and an annual addition of 12 million, the absolute number of persons below the poverty line will definitely be larger While on one side care is being taken to reduce the percentage growth in population and bring it to a static 1 per cent by 2000 A D , an equal amount of stress is needed to see that a sizeable number does not enter the zone below the poverty line The composition of the population below the poverty line also shows that the causes and the nature of poverty vary from region to region As at present, the status of land holding, access to land and its utilisation are definitely one of the economic causes Only 9 per cent of the total area is held by 50 per cent of the holdings below one hectare. It is also glaringly evident that per capita availability of land in India is only 0 60 ha as against 60 ha in Australia, 40 ha in Canada, 9 ha in the U S S R , 4.6 ha in the U.S A and 1 3 ha in Pakisthan Japan has only 0 35 ha which is definitely lower than that of India but three times more productive per unit The problem of viability to a small landholder is glaring, with the present productivity levels and the inequitable landholding pattern. It is also for this purpose that a number of other occupations are being developed to which normally they were used, and

sufficient new avenues are being explored for increasing their incomes. Subsidiary occupations both in the allied sectors of agriculture, as also cottage and village industries have proved to be a valuable addition

In this light, it is being perceived that the economic growth of a country has to concentrate on areas where attention was not adequate in the past In the early stages of resuscitation of the country's economy, it is inevitable that adequate infrastructure to feed the agricultural sector had to be developed. At present, it is the increased agricultural production that has to mould the industrial policy also The increased incomes have to provide greater purchasing power in the rural areas and create the demand for items essential for their further production, and for the amenities of their life Attention to rural areas is not a palliative but an economic necessity.

2. Taking into account the several measures that have been taken for rural development as also those proposed, it would be desirable to have a conspectus of the efforts for rural development Broadly, for purposes of delineation of all the efforts, than for developing an unalterable matrix, a total view can be taken as in *Annexure 1.* All the efforts have been to look after both the economic needs and social welfare of the rural population. The activities might have been inadequate but the programmes were launched almost since independence The total agricultural sector can be viewed from the farm and non-farm activities Agriculture is dependant on inputs, technology and equality of access to resources The social transformation can be brought about by evolution and changes of a socio-psycho dimension, those that are pertinent and healthy in our social life need to be revived and encouraged A participatory structure should be built up that will enable the people to make decisions about their own welfare The minimum social-consumption needs of the community have to be built up as a part of the infrastructure

3 The several components as brought out in *Annexure 1* contributing to the development of the rural areas, and the transformation into an egalitarian agro-industrial society may also be briefly touched In any attempt at the improvement of rural economy, agriculture is bound to be a prime factor Its share in value added is 42.50 per cent and by 1982–83 it is expected to be 38 7 per cent The agriculture, forestry, fishery, etc sectors contribute about 45 per cent to the net national product of the country [1975-47.4%; 1976–44 2%; 1977–45 5%]. The biggest occupational group is agricultural, its percentage being 73 8 (1971) to the number of total workers The dichotomy is that with this high dependence on agriculture, the net sown area per cultivator is only 1.8 hectares with an average per capita production of only 173 kgs It is this situation that has to be improved if the rural economy has to be galvanised Any large-scale structural shift to non-agricultural activities is not possible as yet, though it is regarded as an indicator of development But reliance on primary sector is not always disadvantageous as in the case

of Punjab with 62 per cent of the income (at current prices) from this sector contributing to Rs 1,482 per capita

The genetic revolution broke out from the mid-sixties with the introduction of different varieties of seeds and the use of fertilizers The composite requirements for improving the productivity of land and the total production are a well-known theme Towards this, the impact of technology is as vital as the physical input requirements The water-seed-fertilzer syndrome is well on its way to render agriculture an industry

The fertilizer (NPK) consumption is increasing steadily with about 29 lakh tonnes in 1975–76, 34 lakh tonnes in 1976–77 and 43 lakh tonnes in 1977–78. An appropriate utilisation of fertilizer with reference to soil responses is growing as is being evidenced by an increased utilisation of phosphatic and potasic fertilizers It is estimated that during 1979–80, about 51 lakh tonnes of NPK would be utilised

The seed requirements are receiving comprehensive attention The magnitudes would certainly show their impact on rural areas The programme is activated by the National Seeds Corporation. the State Farms Corporation of India, nine State Governments, as also by the Agricultural Universites and research institutions In Kharif season of 1978, the NSC sold hybrid maize seeds to cover 0 97 lakh hectares, and 2 43 lakh hectares under Bajra In Rabi of 1979 the arrangements are made to supply certified wheat seeds to cover 1.5 lakh hectares Pesticides are matching the requirements, in terms of technical grade material 65 thousand tonnes were made available in 1978–79 which would have benefited well over 88 million hectares These are but efforts to accelerate the input supplies for agricultural production vital to rural economic improvement

The essential water requirements are being improved in a spectacular way. The gross irrigated area is expected to grow to 63 41 million hectares in 1982–83 from 48 41 million hectares in 1977–78. The gross cropped area is anticipated to increase to 180 03 million hectares in 1982–83 from its level of 174 million hectares in 1977–78 Irrigation is vital In the period 1978–83, an additional irrigation potential of 17 million hectares is likely to be added. Out of this, minor irrigation accounts for 9 million hectares. The conjoint use of surface and groundwater is being emphasised under minor irrigation with seven million hectares of coverage anticipated from groundwater sources alone. Out of the 17 million hectares potential created a utilisation of 15 million hectares is expected The problem thereafter is effective water management and scientific utilisation of the water suited to the crops

4 The non-farm activities are as salient for rural family incomes as the farm incomes, particularly for the poorer sections These are additional or subsidiary occupations as an agricultural family is used to composite activities Agriculture in a way now covers the non-farm activities too Chief of them

is animal husbandry and dairy development. The Intensive Cattle Development Projects and similar poultry development projects have shown that with ancillary occupations a small farmer could be made econmically viable. It is the genetic revolution in animal husbandry sector in upgrading the stock through artificial insemination method as also the impact of technology that has opened up new occupational avenues The technology in farming practice suited to dairy industry has shown that one acre and two cows can yield a viable family income which enables the family to crose the poverty line. The initial investments may be heavy but the results very satisfying. The operation flood experimented in Gujarat was a tremendous success. Due to a political culture and a cooperative endeavour the modalities of spreading the benefits of dairy development was demonstrated as feasible. The annual gross income was as high as 400 crores. The operation Flood II phase is expected to cover 10 million farm families and is definetely bound to activate the white revolution. changing the rural scene. The strides in poultry development have been striking. The inland fishery development has touched most of the villages. with modern marketing facilities being introduced.

5. As part of the programmes of social justice and equality of economic opportunity stress is on land reform measures to remove motivational and structural impediments for increasing agricultural production. The abolition of intermediary interests between the State and the tillers of the soil, fixation of appropriate rent. provision of security of tenures, imposition of a ceiling on agricultural holdings, distribution of the land thus made available to the landless cover the entire programme activity under land reforms The anxiety also is that the inbuilt institutional impediments for agricultural production should be removed

6 The access to opportunities for the tiller of the land through land reform measures. the redemption from bonded labour, support to artisans to actively pursue their trades, attention to Scheduled Castes and Tribes. the fostering of the viability of the economy of small farmers and marginal farmers. the amelioration of the condition of the agricultural labourers, are the several steps, through appropriate projects, to tackle the economic betterment of the weaker sections and to achieve social equality. The IRDP is the latest in the series of efforts, further supplemented by Food for Work and *Antyodaya* programmes.

7. Agriculture *per se* has to be supported by an agro-industrial programme, as also cottage and peasant industries. The decentralised sector of industries are playing an increasing role in rural productive avocations. The Khadi and Village Industries Commission has created employment for 28.5 lakh persons till 1978-79. In 1979-80 the cumulative target is 33.64 lakhs. The textile policy has shown a positive shift towards increased cloth production in the hondloom sector. From 2,300 million meters, the programme is

to take it up to 3.700 million meters by 1983 This could create additional employment opportunities Sericulture industry has caught on It is already giving whole-time or subsidiary occupations to 3 7 million persons The export value of handicrafts including carpets was well over 160 crores, and most of these are all produced from rural centres

8 The economic development programmes have always been backstopped by the improvement of the social conditions The Tribal Area Development Programme (TAD) and the subsequent Intensive Tribal Development Projects have concentrated the several sectoral and departmental programmes into a unified project under one agency or authority The project takes into account the social ethos of the population. Legislation to prevent alienation of the tribal land by the exploitative non-tribals is being enforced through several courts specially empowered for this purpose Similarly, the usurious moneylending to the weaker sections is stopped or at least made illegal The social customs and traditional patterns of living are left undisturbed to the extent possible so that the tribals can get the benefits of a better economy without social tensions developing Certain social disadvantages that the Scheduled Castes suffer, even to have access to the primeval necessities of life, have been mitigated both by preventive legislation as by positive vigilance. Opportunities for education and job opportunities have been reserved. The urge for a better social standard among these weaker sections is also channelised in the participatory process and institutions like the panchayats where the rural population can have a role in deciding these issues that touch them as also for special representation, has been provided. The rural social order is not being specifically preserved out of nostalgia but the social disequilibrium among the castes is being eliminated. It is not a revivalism of what nebulously is conjuctured as the golden etthos, nor of 'peasent culture' but a moving social order that suits agricultural industry Facilities for greater motivation in rural areas, emergence of appropriate leadership suited to the moorings and greater psychological fillip are always the theme of several policies and actions If they have not as yet succeeded, it is not due to a lack of strategy, but due to implementational frailities It is recognised that a change in the social order to the rural areas is not easy nor can it be tackled only by governmental and prophylactic measures The rural scene cannot have too many convulsions either The entrenched dominant groups and castes have been just now unlimbering It view of the several institutional measures to achieve a social equality and unhindered access to national resources such as land and water, the strangulating hold of a dominant group has to yield.

9 For sometime past, rural development is being synchronised with "integrated" rural development. The stance on "Integration", however, is differently poised both in verbal construction, in varying situations and is also causing much cognative dissonance The Government of India have given

the approach to Integrated Rural Development in their letter of March 23, 1978 The theme is being sharpened or extended annually as to be able to cover the whole of India, and also directly touch the weaker sections. The latest communication of May 21, 1979 *(Annexure II)* stressed the allocation of Blocks for IRD work on the criteria of "bonded labour" in some districts, and preponderence of Scheduled Castes in others indicates the penetration that the integrated programme seeks to achieve

10 While the total IRD activity can be subsequently analysed, it would help in seeking the past perceptions of the state governments. The Integrated Rural Development Programme was analysed by the several State Governments into action projects, at the time of formulating their "Sixth Plan" (1979–83) drafts The concept itself is taking shape, as can be noticed by glancing into their developing plan documents. Karnataka Government consider that the earlier plans on rural development had a project and sectoral approach, which did not lead to an overall development of the area, nor to the benefit of the weaker sections of the society. The unemployment situation, as also the characteristics of poverty vary from place to place even within the State depending upon the agro-climatic situation and endowment of local resources An attempt of Integrated Rural Development is, therefore, to evolve specific detailed projects suited and render the programme area-specific as also utilise better the available local resources to achieve growth with social justice and full employment. Hence one of the important modalities in this is "to plan for integration of various programmes and establish appropriate linkages for fuller utilisation of local resources consistent with the plan objectives and local needs" They conceive that the intention of the Integrated Rural Development is to specifically benefit the target groups comprising small and marginal farmers, agricultural labourers and rural artisans; it is considered that this approach will also substantially help the Scheduled Caste and the Scheduled Tribe families who are among the most disadvantaged sections of the population An important approach is that with the formulation and implementation of district plans in the State the needed inter-sectoral coordination as well as an integration of various programmes will be better achieved The IRDP would, therefore, be a harbinger, and a part of the area planning system

The Kerala Government consider that certain regions in the State with unique physiographic and natural features have remained economically and socially backward though they are endowed with specific resources They could not receive adequate government support and disjointed and isolated attempts of developments in the past did not help to mitigate their problems. These areas are now getting a comprehensive approach integrating the various aspects of development In some ways it is a planning process that is being advocated with the idea of removing intra-state disparities.

Maharashtra Government consider that, after the early community development projects, the idea of integration at the grass-root level has been reintroduced in developmental administration with the advocacy of Integrated Development Projects The selected project areas would have certain special problems which require implementation of a set of activities which have to be coordinated in space and time It is the development of a spectrum of activities implemented as a set at the rural level that emerges out of this thinking

The Madhya Pradesh Government mention that the Integrated Rural Development could tackle unemployment and disguised unemployment in the rural areas. This is one of the means for a specific objective.

The Uttar Pradesh Government consider that the Integrated Rural Development Programme is a part of local-level plan. The special thrust is on execution of schemes yielding quick results, involve small investments, create avenues for employment, promote development/conservation of natural resources and, where possible, produce consumption of goods for the common man Generally, these schemes would cover agriculture, soil conservation, minor irrigation, dairy development, rural cottage industries and fishery development The plan formulation expects that the local-level planning and *Antyodaya* programmes would be integrated with the Integrated Rural Development and that the resources provided for these would be utilised for purposes of planning and development at the block and district levels The accent is on weaker sections and the planning process as the medium for integration of the relevant projects for employment generation.

Punjab has developed an Integrated Rural Development Programme for the whole State echoing the growth-centre approach Under this programme 500 villages will be developed as focal points for rural development. Each one of these points will provide essential services including banking and credit facilities, agro-service centres. retail outlets for essential commodities and agricultural inputs, marketing yard, medical facilities and veterinary hospital Each one of these focal points will service a cluster of 20 to 25 villages within the radius of five miles This IRDP is the provision of semi-urban centres in the rural areas with facilities and amenities A type of urban-rural continuum is being established now.

The Government of Andhra Pradesh have kept the IRDP closely associated with SFDA, DPAP and CAD, as was visualised by the Government of India. They, however, stressed "the goal of self-sufficiency in production, growth for social justice and full employment for the unemployed and under-employed in the rural areas" The integration is contemplated in four major sectors—Agriculture, Village and Cottage Industries, Tertiary sector employment and labour mobilisation.

The Bihar Government's approach is that the removal of unemployment and under-employmant could be easier of achievement through are a specific programmes than through macro-level planning Such an area planning enables the selection of programmes suitable to that particular area, as also the identification of the available and potential labour needing training in skills and the tying up identified labour with labour absorbing progrmmes The Area Planning enables the integration of different programmes as also the identification of target groups on a family basis The approach of IRD is evolving in this thought-process into either block level or sub-block level area programmes

The concept of integration in the above illustrations is a unison of activities in different programmes, the dovetailing of one with the other when necessary The programme for weaker sections and for employment are strengthened with the additional funds of IRD The project base and the facilities under the existing special projects for creating greater employment opportunities are also utilised to build further on them the integrated projects

11. Another concept of integration lies in suitably sequencing the several components of any project to render it comprehensive The inter-relationship is not so much among the projects, but in the several sections needed for achieving the total objective of the project This view of 'integration' is common but a few instances would bring out the characteristics of this approach

Karnataka has an integrated programme for artisans Apart from credit facilities at low interest rate, their requirements of raw materials, remunerative market, and needed technology are to be met. This is a sequencing of requirements and developing independent action on each component The integrated development of horticulture covers area development under selected crops, setting up of nurseries, providing extension staff, establishing a market net-work including processing units. This project covers action in different geographical areas also to be synchronised with input and marketing arrangements The Integrated Development of Western Ghats is a total area development with different types of sectoral activities specifically needed for this backward area brought together. These are Animal Husbandry, Horticulture, Agriculture, Irrigation, Forestry, Small-scale Industries and Sericulture

A project like Horticulture Development in Madhya Pradesh highlights the many parts that make up this activity The intention is to set up a separate section under agriculture with potentialities for extension work. Nurseries will be organised and marketing support, through cooperative horticultural societies will be given, fruit preservation and canning centres established Different types of horticulture including vegetable cultivation

will be encouraged This project takes into account the several requirements for better horticultural development and brings together the several elements for the efficient operation of a project

Punjab has several types of Integrated Projects such as the Integrated Cotton Development Project. Integrated use of Surface and Groundwater, Integrated Survey of Livestock, Integrated Buffallo Breeding and Soil Evaluation Programme. Integrated Rural Development Programme for Small Industries These are composite projects with all the elements taken together They also provide money for the Integrated Rural Development Programme in the several sectoral programmes as in Dairy, Horticulture and Animal Husbandry, Small Scale Industries and the like The projectisation with the different sections built into the total product is noticed in the items mentioned

12. The Integrated Rural Development Programme of 1978, in a way, emerged from the earlier ideas of the management and use of all the natural resources in the district for Rural Development through the application of science and technology In order to make this original idea workable and capable of being implemented through the existing sectors and Governmental structure four main components were drawn up and sought to be integrated Agriculture and allied sectors· village, cottage and tiny industries, tertiary and service sectors, and the mobilisation of facilities for labour employment and for mobility

Increased emphasis on rural betterment, coupled with the aim of achieving full employment are emphasised in the concept of Integrated Rural Developmet The action is in achieving intensity for full employment through productive investments and to raise as many families as possible above the poverty line. The overall aim of integration is that the different components and projects of SFDA, CADA. DPAP, ITDP should be dovetailed with those formulated with the new perspective of increased earnings for the lower income groups and employment for the unemployed. To achieve this, a transfusion of additional funds over those of the special projects is offered. In SFDA/CADA blocks it is 5 lakhs. in DPAP it is 4 lakhs The modalities of executing each of the projects is the same as that of the special projects in regard to choice of beneficiaries, subsidies, institutional finance, and the type of projects to be chosen. While in 300 blocks, the IRDP is not superimposed on other projects, Rs 2 lakhs are given to each one One thousand blocks out of these are again are allocated intensive work In addition, recently 300 blocks have been taken up, in 1979-80 to pay special attention to areas with concentration of bonded labour and 20 per cent of Scheduled Caste population. A direct attack on employment and an individual approach would be needed in the utilisation of these funds

The new IRD Programme is superimposed on the SFDA programme activity, just as small farmers were identified, the new target group will also have to be identified by detailed household survey This is the spotting out of the needy and attack his unemployment, instead of depending on several general schemes to have their impact on employment The variation between SFDA pattern of assistance and this is that the IRD Programme assistance is not limited to agriculture and allied sectors only Secondly, the approach is to offer a viable economic activity on a permanent basis and not merely offering of assistance to a farmer for his avocation The present assistance covers service industries sectors A family-wise analysis to benefit the individuals is needed in implementing this programme. At one point of activity, where the poorest sections are being assisted it assumes the character of the *Antyodaya* programme It also enjoins that out of the total number of beneficiaries at least 20 per cent will have to be from Scheduled Castes and Scheduled Tribes. The assistance provided will have a package of service not limited to one item In any project the forward and backward linkages have to be carefully worked out so that the different components necessary for a total economic activity may be introduced from other plan sectors. Thus, the infrastructure needed for making the project a composite and viable entity will have to be provided by other regular sectoral budget provisions. It is in this direction that the integration of one project with other sectors becomes necessary Care, however, will have to be taken that the present IRD programme does not evolve only into another crash scheme for employment, the location of each of the job opportunities into a scheme of production plan has to be ensured It is not merely the ingrediants in each project that need to be ensured, but groups of such projects have to be part of a major thrust in production

13 The integration within a project to establish an effective sequence of activities, and the inter-linking of different programmes and projects has been mentioned Above all, an integration of the twin forces—social and economic—is the most important of all The real integration is of the themes of rural transformation and of the thrusts of rural change The protective legislations in land reforms in prevention of caste diabilities, and positive measures for reservation of opportunities have to be effectively fused with the several economic measures to give them better production patterns and employment This conjoint effort of two different themes for the same purpose is important for the rural regulated upheaval The different influences combine for the same cause, the provision of the basic needs strengthens the productive capacities; this is a facet the results of which are already noticed, though in pockets in some States. The integration of the measures for the weaker sections with an overall increase in production should not be lost sight of Above all the full utili-

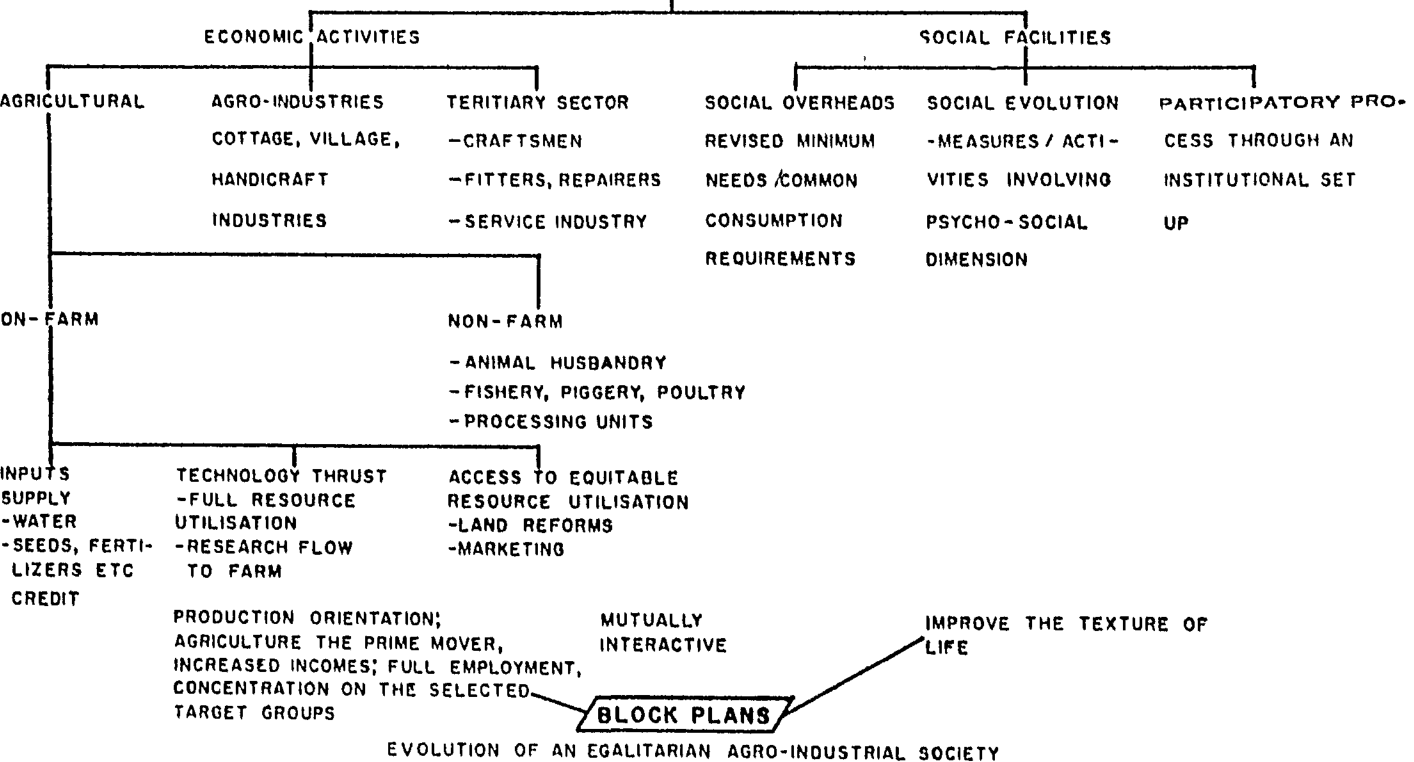
sation of all the resources in an area is the ultimate in the integration pattern. Science and technology considerably help this objective. A National Integrated Rural Development (NIRD) is to evolve.

This comprehensive integration can be achieved only in total micro-planning with a given spatial dimension The sectoral programmes will rarely merge with each other unless the shop-level implementation system is carefully drawn out and the role of each sector clarified The total impact of all the programmes—those contemplated under IRD. others from in-put promotion sector. and the R.M N P. can be harnessed together only in a plan frame for a block or a district. It is therefore, necessary that the comprehensive plan approach be accelerated for the IRD programme to be as effective as it is designed to be The confusion in some instances that the programmes under IRD constitute the entire block plan will have to yield place to a systematic area plan incorporating production and employment measures for social change and a welfare activity. Another important inevitability to be forestalled is the urban-rural dichotomy. The future in "integration" has to perceive this A comprehensive spatial plan alone can include in it the needed urban-rural continuum. The next stage after concentrating on IRD. will be the attention paid to urban growth centres in rural areas so that in any of the urban problems now felt can be minimised. After the 1970 WACARRD organised by FAO, it is a fair guess that the next world conference will be on rural-urban interactions

14. To talk about the 'concept' of rural development is to miss its relativity to time and space. The essence of rural development lies on the Indian scene, in material happiness and social status It is not denied that increased incomes or comparative affluence do not constitute a developed rural society. But to assert that the social mores should change, group tension even out. or equal accessibility for a role in the community be available, before any development takes place raises the question of the egg and the chicken. The several steps to improve either situation are launched simultaneously Equal access to natural resources is a prerequisite for agricultural production in all in rural areas. Land Reform measures, however, tardily implemented are accepted as part of the rural development process The benefits of the rural prosperity should be shared by all and particularly by the weaker sections

The facilities for achieving such, lie largely in the increase of agricultural production, and in activating village and cottage industries Agriculture itself will develop with its interaction with industrial growth. The inputs needed for both, and marketing of the product have to be sustained. The constraints—sociological and physical—for effectively achieving the improvements should be watered down. Where these contraints are imbedded in the society, such will have to be tackled both by ameliorative measures as

also by rendering opportunities promptly Rural development implies economic betterment with social change The emphasis on tackling unemployment has these two ingredients : by increased incomes through improved skills the economic status is built up, by concentrating herein on weaker sections the deprivation inherent in the social structure is remedied. The supply of the minimum social consumption requirements not only make living comfortable, but will add to the production efficiency, by better health standards and greater awareness of the developmental facilities The influence of such non-economic determinants in economic growth has been stressed from a very long time Rural development has to emerge out of such an interaction.


ANNEXURE I
RURAL TRANSFORMATION
ECONOMIC ACTIVITIES
SOCIAL FACILITIES
AGRICULTURAL
AGRO-INDUSTRIES
COTTAGE, VILLAGE,
HANDICRAFT
INDUSTRIES
TERITIARY SECTOR
-CRAFTSMEN
-FITTERS, REPAIRERS
-SERVICE INDUSTRY
SOCIAL OVERHEADS
REVISED MINIMUM
NEEDS /COMMON
CONSUMPTION
REQUIREMENTS
SOCIAL EVOLUTION
-MEASURES / ACTI-
VITIES INVOLVING
PSYCHO-SOCIAL
DIMENSION
PARTICIPATORY PRO-
CESS THROUGH AN
INSTITUTIONAL SET
UP
ON-FARM
NON-FARM
-ANIMAL HUSBANDRY
-FISHERY, PIGGERY, POULTRY
-PROCESSING UNITS
INPUTS
SUPPLY
-WATER
-SEEDS, FERTI-
LIZERS ETC
CREDIT
TECHNOLOGY THRUST
-FULL RESOURCE
UTILISATION
-RESEARCH FLOW
TO FARM
ACCESS TO EQUITABLE
RESOURCE UTILISATION
-LAND REFORMS
-MARKETING
PRODUCTION ORIENTATION;
AGRICULTURE THE PRIME MOVER,
INCREASED INCOMES; FULL EMPLOYMENT,
CONCENTRATION ON THE SELECTED
TARGET GROUPS
MUTUALLY
INTERACTIVE
IMPROVE THE TEXTURE OF
LIFE
BLOCK PLANS
EVOLUTION OF AN EGALITARIAN AGRO-INDUSTRIAL SOCIETY

ANNEXURE 2

Relevant Extracts of D. O. Letter No. M. 11012/42/78-IRD Dated May 21, 1979 from the Secretary, Ministry of Agriculture and Irrigation (Departments of Agriculture and Rural Development) Government of India, New Delhi, to the Chief Secretaries of States and Union Territories.

(2) You would recall that 300 blocks were allocated on the basis of five criteria in 1978–79 Of these, ene criterion, namely, allocation of blocks for bringing the coverage of blocks under integrated rural development programme to 40% of the blocks no langer holds good as this 40% coverage had been achieved last year itself In the place of this criterion, another criterion, namely, coverage of blocks with preponderance of bonded labour has been considered relevant A study conducted by the Gandhi Peace Foundation has indicated that the bonded labour problem is acute in 12 districts in different States and their rehabilitation would be desirable and would be in tune with the objectives of the IRD programme as all bonded labourers will be below the povety line. The Ministry of Labour, Government of India, have been emphasising the need to bring the blocks with preponderance of bonded labour and umbrella of IRD programme

(3) In consultation with the Planning Commission, the following criteria have, therefore, been chosen for allocation of 300 blocks

i) *Criterion A* One block per district per year has been allocated in respect of 51 districts in different States which are not covered by any of the three special programmes and find place in the list of backward districts identified by the Dantwala Committee

In the case of Union Territories, where developmental effort under the IRD programme started only in 1978–79, 5 blocks have been allocated on an ad-hoc basis to Mizoram only as other Union Territories have not shown much response to the programme The total number of blocks allocated under criterion A, and the number of blocks allotted to Union Territories is 56

ii) *Criterion B* At the rate of the one block per district per year, blocks have been allocated to 38 districts which are not covered by any of the three special programmes and do not find place in the list of districts identified by the Dantwala Committee The total number of blocks selected under this criterion is 38

iii) *Criterion C* The old IRD programme came to an end by 31st March, 1979 Continuation of developmental effort in these blocks covered by the old IRD programme would yield better results as sufficient organisational and developmental effort has already been initiated and built up in these blocks. Only such blocks of old IRD programme which have not been covered by any of the three special programmes and have become operational in 1978–79 have been considered for allocation Such blocks are 35 in number and all the blocks have been selected

iv) *Criterion D* The incidence of bonded labour is found in many areas but the problem is reported to be most acute in 12 districts spread over eight States Two blocks per district have been allocated for these districts The State Governments may examine the blocks having preponderance of bonded lobour and select only those blocks where the problem is acute in the districts specified Total number of blocks allocated under this criterion is 24

v) *Criterion E* On a pro-rata basis, 147 uncovered blocks with 20% and more of scheduled caste population have been allocated to states The state-wise allocation of blocks under criterion E is as shown below ,

	State	Allocation of blocks with 20% and more of SC population
1	Andhra Pradesh	7
2.	Bihar	13
3	Haryana	4
4	Karnataka	7
5	Orissa	1
6	Punjab	11
7	Rajasthan	4
8.	Tamil Nadu	22
9.	Tripura	1
10	Uttar Pradesh	64
11	West Bengal	13
	Total ·	147

(4) The allocation of blocks as per the various criteria detailed in Para 3 shown below :

Criteria	Blocks allocated	Coverage of blocks with 20% and more of SC population
A	56	20
B	38	8
C	35	3
D	24	4
E	147	147
	300	**182**

(5) Selection of blocks will be made by the State Government/Union Territories according to prescribed criteria It is stipulated that in selection of the blocks, the State Gouernments should give first priority to those blocks which have 20% and more of scheduled caste population in them and which are not yet covered by any of the three special programmes There are 303 such blocks in the country as on today. The State Governments should cover as many as 182 blocks with 20% and more of scheduled caste population, including the 147 blocks allocated under criterion E .

(6) Each of the 300 blocks will receive Rs 2 lakhs for intensive development of the block and Rs 60,000 per plock towards conducting a base-line survey.

(7) The Dantwala Committee has recommended the establishment of Planning units at district levels for preparation of block-level plans A final decision in the matter is expected to be taken shortly. In the meantime steps may be initiated to prepare the block plans on the basis of the guidelines and the methodology already communicated

(8) You are requested to kindly finalise the selection of blocks as quickly as possible

SOME DEMOGRAPHIC FEATURES OF RURAL INDIA

S. Balakrishna

International Background

In order to put the demographic problems of rural India in the proper perspective, a brief mention is made below of the broad demographic features at the international level

The world's population touched the 4 billion mark in 1975 and was growing at the annual rate of 1.9 per cent between 1970 and 1975 The countries of the world are divided into two broad categories, *viz*, more developed and less developed on the basis of the per capita income level While the population in developed countries has been growing at the rate of 0 9 per cent every year, its growth rate in the developing countries has been 2 3 per cent The less developed or developing countries account for 72 per cent (2 9 billion), of the total population of the world while the remaining (1 1 billion) 28 per cent inhabit the developed countries

Before a mention is made of the extent of population residing in rural areas, it is necessary to refer to the definition of rural areas adopted by various countries In the first place, the definition of a rural area is residuary. What is available is a definition for urban areas and settlements other than urban are automatically labelled as rural areas For the sake of comparison while it is necessary to have a uniform definition of rural areas for all countres, in actual practice this is not possible for obvious reasons. The stage of development and the local conditions differ from one area to another and what is urban in one country may not appear to be convincingly so in another No wonder, then, that a place with 200 inhabitants or more is declared as a town in Greenland, Sweden and Faeroe islands (besides other indicators in the latter two cases) whereas the minimum population required for a place to be declared as a town in Japan (apart from other indicators) is as high as 30,000 All the same, certain broad criteria are followed by various countries of the world for the purpose of defining an urban area These are (1) Administrative (divisions or headquarters), (2) Local Government (corporations, boroughs, etc), (3) Ecological (based on population size or density), (4) Economic (areas with predominantly non-agricultural labour force, and (5) urban characteristics (water supply, electricity, market, etc

Following the non-uniform definition of a rural area, it is found that 61 per cent of the world's population lives in rural areas (1975) The corresponding percentages for more developed and less developed countries are

31 and 73, respectively It will be seen that the developed countries are highly urbanised whereas the developing countries are mostly rural based

Rural Demographic Scene in India

Definition of Rural Area At present, in India, a settlement is defined as urban if it fulfils either of the following conditions. (1) The place should enjoy a statutory label of local government administration (corporation, municipality, notified area, etc), (2) The following three-item test should be simultaneously satisfied *(a)* a population of at least 5,000, *(b)* a density of at least 400 persons per sq km , (c) at least three-fourths of the male working force should be engaged in non-agricultural occupations. Besides, the place should have a few pronounced urban charcteristics and amenities However, certain discretionary powers are given to the census authorities to make exceptions in a few justifiable cases (townships, tourist places, etc). Places which do not satisfy either the local self-government criterion or the three-item test fall into the rural category.

While the definition of an urban area is more or less the same in 1961 and 1971 censuses this was not so in the earlier censuses Prior to 1961, besides the local self-government criterion, the only other indicator considered was population No quantitative limits were clearly specified for density and non-agricultural nature of occupation pattern although these were also referred to in the definition Hence the definitions over the decades are not strictly comparable

Rural Population At present (1971) 80 per cent of the population in India live in rural areas This percentage was 89 at the turn of the century and the decline has been relatively more rapid since independence

The three most populous states in India (1971) are Uttar Pradesh, Bihar and Maharashtra For rural India, while there is no change in the first two ranks, Andhra Pradesh takes the third place There are hardly seven countries in the world whose population exceeds that of Uttar Pradesh In terms of area, the three important States are Madhya Pradesh, Rajasthan and Maharashtra The area of Madhya Pradesh exceeds that of any country on the European continent excluding the USSR

The percentage of rural population in the states varies between 93 (Himachal Pradesh) and 69 (Maharashtra)

Vital Rates. The annual growth rate (per cent) of the population is 1.94 for all India (1976) For the rural areas, it is 1 95 while for the urban areas it is 1 89 indicating that there is not much of a difference in the natural growth rates (excludes growth due to migration of urban and rural areas. As for the natural growth rates of rural areas among various states. Nagaland has the lowest growth rate (1.2 per cent) while Tripura has the highest growth rate (2 3 per cent) Rural Madhya Pradesh and Haryana have annual growth

rates of 2 3 per cent and 2 4 per cent, respectively. indicating that high growth rates are not confined to backward states only.

The rapid population growth in our country is mainly due to the declining death rates existing side by side with relatively high birth rates prevailing over a long period The crude birth rate (1976) is 35.8 per 1,000 population for rural India as against 28 4 for urban India (All-India 34.4). The range of variation among the states (rural areas) for crude birth rate is 20 3 (Nagaland) to 41 2 (Uttar Pradesh). Rural Madhya Pradesh has also a high birth rate of 41. As regards the crude death rate, the level is 16 3 for rural areas whereas it is only 9.5 for urban areas. (All India 15 0) The range of variation in this case is from 5 6 (Manipur) to 21.7 (Uttar Pradesh).

It will be noticed that the rural areas have relatively more birth rates as well as death rates as compared with urban areas and, consequently, there is not much of a difference in the resultant growth rate as referred to earlier. While the death rates have been declining since 1921 it took a much longer time for the birth rate to register a drop In fact, it was only in 1966 that a perceptible and welcome decline started in the trend for crude birth rate.

Density The density of population is a simple indicator of the pressure of population on a given area. While the density of all-India is 177 persons per sq km that of urban India is as high as 2,505, for the rural areas, it is 148 persons per sq. km Among the states (rural areas) the range is 28 (Nagaland) to 477 (Kerala) But it would be wrong to think that a state is over-populated merely because its geographical density is relatively high It is necessary to relate density to the existing land and other resources and calculate what may be called the carrying capacity of these resources. It is a historical fact that people settle down in large numbers in areas which are fertile and can support a large population. With the improving technology, it is possible to tap resources hitherto not exploited and make them support more and more people From this point of view, it is quite possible that the states/districts which are seemingly very dense can support a larger population than they do at present through better exploitation of the existing human and natural resources On the other hand. the sparsely inhabited areas might have already reached the saturation point and may be incapable of sustaining further pressure of population But this must be carefully investigated through properly planned studies for assessing the carrying capacity of the resource endowments

One would think that the problem of uneven densities in various areas of the country can be resolved by promoting internal migration on a planned basis. But this is easier said than done The Indian population is not particularly known for its mobility. As a matter of fact, the inter-state migration accounts for hardly 3 per cent of the total population.

Young Population One of the important characteristics of the demographic scene in the developing countries is the remarkably high proportion of

youth (below 15 years of age) In rural India, 43 per cent of the population was in this juvenile age group in 1971 This was the case in the earlier Census also For all-India, the percentage is 42 and for the urban areas 39 The range of variation in rural areas is from 38 per cent in Tamil Nadu to 47.5 per cent in Assam There is nothing wrong in a country being peopled mostly by the young provided they are properly fed and clothed Our problems are different from those of the developed nations some of which lost their active population in wars and have become 'aged' nations now Coupled with this is the fact that mortality strikes a heavy blow at the young age groups in our country In fact, nearly half of the deaths that take place in our country occur in the age group below 15. The infant mortality rate at 141 per 1,000 live births (1972) is unconscionably high The rate for all-India is 132 and that for urban India 85 It will not be out of place to mention here that for the developed countries the infant mortality rates are in the range of 25 to 30 per 1000 live births The range of variation among the various states is also very striking. While it is the lowest in Kerala (67) the maximum is found in Uttar Pradesh (165)

The implications of a high proportion of young population combined with a high infant and child mortality rate are very serious In the first place, it means a colossal wastage of human resources; the investments made on the upbringing of the children are not recovered by the society since the proportion of those who do not survive to join the labour force and contribute their mite is not negligible Where they survive, their contribution is impaired by the fact that they are undernourished or malnourished leading to low productivity and output But they are sizeable in numbers and providing employment to all of them is also a problem The other consequence of a large young population is the tremendous addition that is made to the number of women in the reproductive age group As the base of fertility is the child-bearing woman, the fact that the future mothers are already born and that the number is much more than in the previous generation should make one ponder over the consequences for the population programme

It is in this context that the Child Health and Welfare Programmes like Applied Nutrition, Intensive Child Development Scheme, Family Planning Programme assume importance The success of these programmes is very essential particularly in the rural areas in order to achieve the overall objective of our plans, *viz* , to improve the quality of life

While the percentage of young population is expected to register a marginal decline in the coming decades, the remaining two age groups, *viz* , *(a)* 15 to 59 years, and *(b)* 60 years and above are likely to increase their relative share to a slight extent While the rise in the middle age group has implications for labour force and employment as well as increase in the

number of child-bearing women, the increase in the old age group points to the need for better social security measures for old people

Dependency Ratio The economically active population refers to the persons in the age-group of 15 to 59 and the rest may be called dependants (those who are below 15 or above 60) By dependency ratio is meant the number of dependants per 100 economically active persons For rural India, the dependency ratio in 1971 was 96 as against 79 for urban India. The all-India ratio is 92 Among the states, it varies from 79 in Tamil Nadu to 113 in Haryana It is interesting to note that Haryana is contending not only with a high growth rate but also a high dependency ratio. Rural Tamil Nadu ranks high on poverty according to some income disparity measures and it is worth noting that this is the case in spite of relatively low dependency ratio

Literacy Rate. There is a striking contrast between the literacy rate of rural and urban areas. While 52 5 per cent of the urban dwellers (includes 0-4 age group) are literate, the rate for rural areas is as low as 23.7 per cent. The range of variation among states (rural areas) is from 13 9 in Rajasthan to 59 3 in Kerala In the case of females, the literacy levels are still lower. Low literacy rates combined with the lack of improved skills are acting as a stumbling block to progress and development in the rural areas. A modicum of literacy is an absolute necessity for the purpose of meaningful participation of the rural people in the implementation of various developmental programmes (adoption of agricultural practices, family planning practices, etc) it also helps them to resist the exploitation by the moneylenders who take advantage of their inability to read and write. The programmes for functional literacy and adult education assume relevance in this context.

Workers. According to 1971 census, the percentage of workers to the total population in rural India was 34. This low participation rate is perhaps partly due to the high dependency ratio which, in its turn is caused by the high proportion of young population The corresponding rate for urban India was 29 while that for all-India was 33. In the case of females, the participation rate in rural India was still lower (13 per cent)

Among the states, the range of variation of rural participation rate is from 27 per cent in West Bengal to 51 per cent in Nagaland It will be noted that some of the prosperous states like Haryana and Punjab are having a relatively low rate of participation of workers whereas backward states like Madhya Pradesh have a higher percentage of workers. It is likely that in the former states the efficiency factor operates keeping the percentage of workers at the minimum required. On the other hand, in the backward states, a limited volume of employment is possibly shared by too many workers with the result that a large portion of them are underemployed.

The percentage of agricultural workers has remained more or less stagnant over the decades, in 1971 this percentage was 73 8. But the variation among the states is very wide While in Madhya Pradesh 89 per cent of the workers are engaged in agricultural occupations, at one extreme Kerala records the lowest proportion at 54 per cent

Migration While the importance of rural-urban migration is well recognised. this is not so with regard to rural-rural migration As a matter of fact, the latter streams account for 71 per cent of the total migrants whereas the volume of the former is only of the order of 24 per cent Since much of the female migration is due to marriage, the real trends should be examined for male migration Here we find that rural-rural migration accounts for 53 per cent of the total volume of migrants whereas rural to urban migration accounts for 26 per cent of the total The rural-urban migration has two implications In the first place, the young and productive workers of the rural areas are lured to the towns in search of an uncertain future leaving behind the old and unenterprising people in the villages This tells on the economy of the rural areas Secondly, the migrant to the urban areas finds it difficult to improve his lot for want of improved skills

In the case of rural to rural migration the migrants are mostly agricultural labourers and small farmers who go in for either on-farm or off-farm activities for supplementing their meagre incomes The various rural employment schemes launched from time to time to improve the earning capacity of the rural people are relevant in this context The National Commission on Agriculture has observed that the future additions to the labour force will have to be absorbed in the rural areas only and that too in the non-agricultural sectors of the economy In this context, the ruralisation of industries and schemes for helping the agricultural labourers to acquire additional skills should be properly explored After all, most of the agricultural labourers are so today due to historic reasons relating to landlessness and impoverishment and it is on record that some of the best rural artisans of our country in the pre-British India became agricultural labourers within a century for very compelling reasons It is high time that they were rehabilitated properly

Women Women who comprise nearly half of our population have received a raw deal over the centuries The cumulative effect of all these is clearly discernible in several indicators An unfavourable sex-ratio with an excess of males is a characteristic shared by most of the developing countries It is a matter of concern that the all-India as well as rural sex-ratios have been on the decline since the beginning of the century. The causes for this trend have not been fully investigated but it is surmised that this is possibly due to general neglect of women and their status The low age at marriage (16.7 years). the high maternal mortality (250 per 1,00,000 live births) the pitiably low levels of literacy (13 per cent). low level of employ-

ment (13 per cent) and the low level of expectation of life (46 years for all-India during 1961–71) are all eloquent indicators of the sad plight of women particularly in the rural areas. Programmes for the welfare of women and recommendations of commissions for improvement of the status of women should receive more attention than they have received so far.

THE SOCIAL STRUCTURE IN RURAL INDIA

S P. Jain

In analysing the social structure of village communities, scholars have generally paid attention to aspects such as caste groupings, kinship groupings, rank and prestige, family system, power structure, economic groupings and relationships. The term 'social structure' has been used frequently in its wider connotation, referring to any or all features contributing to the total make-up of societies Social structure, therefore, has been defined differently by different scholars, depending on one's background and the context of enquiry. For instance, while the social anthropologists have tended to emphasise more on features which are associated with tribal societies, the sociologists, on the other hand, have confined themselves to features which determine the nature of human relationships Here the latter is dealt with as it is more relevant for the description of a society which is in the process of change.

An analysis of social structure of rural communities, particularly in the context of India, cannot be total because of the fact that social life differs from village to village. The present attempt, therefore, focusses on such features as are relatively common to one or more number of regions in the country. There are about 576 thousand villages in the Indian Union and the bulk of population (82 per cent) belongs to these villages. While in a large majority of the villages the traditional features of social structure still persist, but there has been rapid change also under the impact of various programmes which have been introduced from time to time after independence Therefore, the salient features of social structure are to be described in the perspective of a society which is in the process of change.

Village Communities in India

Sir Henry Maine has distinguished between two types of villages in India—the "joint" and the "severalty". The former prevailed in the North-West Frontier Province the Punjab and the United Provinces. and the latter in Peninsular and Central India. It also existed in Bengal and Bihar before the introduction of Permanent Settlement in 1793. In the "joint" type which consisted of "*Pattadari*" and *Zamindars*, the village land constituted the joint property of an organised proprietory body In a "joint" village there were two classes of men, one with proprietory rights, the other without them The "severalty" or *ryotwari* villages exist in most parts of the country In this type, the unit for land revenue is not the village, but the holding of each owner, which is assessed and paid on an individual basis. Another salient feature of Indian village communities is the existence of a

panchayat or council which exercises social control and regulates socio-cultural life of the village people

The Indian village is generally characterised by intimate interpersonal contacts, predominance of caste system, prevalence of joint family and of the agnatic-kin-group which consists of a few joint families Also, the key functionaries in the village such as the headman (*Patel*) and the accountant (Karnam or Patwari) hold the offices based on hereditary principles Other significant features are the 'physical' and 'ritual' unity which provide the people of a particular community a sense of belongingness in different social and economic situations

Rural Social Structure

Of all the components of rural social structure, caste has been considered as the most important. It is an institution which determines most of the aspects of social life of an individual in village communities More specifically, it determines the individual's social status, occupation, marriage affiliation, economic dependence on others, rules of commensality, political power, and so on In general, various caste groups in a particular village are interdependent in day-to-day matters as well as rituals This interdependence is not confined only to social relationships but also to economic relationships wherein each caste group has certain well-defined functions to perform in the overall network of economic activities in a village The services offered by a particular caste group to the others are paid for. At times, this payment is made in cash or in kind, or both, depending upon mutual understanding All castes are traditionally arranged in a hierarchical order which is predetermined on the basis of ritual purity and functions performed This kind of caste stratification is based on the Hindu pattern of division of society into four broad *varnas* (categories) Thus, the *Brahmins* occupy the top place in the order followed by other clean castes At the bottom are placed the unclean castes that are engaged in occupations carrying low prestige Thus, the caste largely determines the function, status, the available opportunities as well as the handicaps for an individual Its influence is also to be found on cultural patterns of people. According to A R Desai, "It has fixed the psychology of the various social groups and has evolved such minutely graded levels of social distance and superior-inferior relationships that the social structure looks like a gigantic hierarchic pyramid with a mass of untouchables at the base and a small stratum of elite, the Brahmins, almost unapproachable, at the apex".*

Caste and Occupations

It has been maintained by scholars that caste is nothing more than the systematisation of occupational differentiation. Even though a caste is not

* A R Desai, *Rural Sociology in India*, Popular, Bombay, 1974, p 38

only associated with an occupation and has a kind of limited monopoly over it it is not true that this applies universally. Generally speaking most of the people also practise agriculture in addition to the hereditary occupation followed by their own caste. For example, a *kumhar* (potter) may be an agriculturist in the mansoon months. and a trader in grain for a brief period after the harvest. Often, the artisan and servicing castes. do not have an adequate income for their traditional occupations and they, therefore, work on land either as tenants or as casual labourers. According to Iravati Karve. caste system implies specialisation of functions as a result of which there develops caste inter-dependence It is because of specialisation of functions, which remained subservient to agricultural economy, that all the castes in a village become dovetailed in a socio-economic systems. But with the growth in rural population, during the past three decades and with industrial development progressing at a fast rate. the rural people who have hitherto remained on their traditional caste occupations, have found an opportunity to migrate to urban industrial centres in search of employment and this has contributed to the weakening of the rural traditional occupational structure.

Occupations are also classified into prestigeous and non-prestigeous; just as the castes are For instance, manual labour is looked down upon and certain occupations like swine herding and butchery are considered to be polluting

There is ample evidence to show that the caste system is closely linked with economic aspects such as production. consumption. indebtedness, habitat and mobility. The caste structure has close ties with rural economy. In the classical system of relations among the castes in a village, (the *Jajmani* system) the various non-cultivating castes provided specialised services to the cultivators and received payment in kind The economic interdependence is strictly regulated by social and religious patterns which keep the caste groups segregated in certain respects and require communication and interchange in other respects Caste ranking and economic status are thus closely linked In all these spheres. caste has been found to be playing an important role both directly and indirectly Besides the institution of caste has also been considered as a major force in governing other aspects of rural life These include type of family, education. political behaviour. value orientations and power structure. The studies which are available on the subject clearly indicate the all-pervasive nature of caste

The Joint Family System

Another important institution intimately associated with the life of the rural people is 'family'. So far, the traditional 'joint family' was responsible for performing all the important economic, political, social, religious, recreational and cultural functions in the society Under the impact of increasing

urbanisation and other economic forces, the joint family system has broken down. Therefore, what we find at present is that about 77 per cent of the households in the villages constitute small and medium households and every third household in the village constitutes a family having three or less than three persons It is concluded by sociologists that the traditional joint family is disintegrating and is creating varied types of family structures which have lost their old vitality and functions and which have still not crystallised themselves into healthy nuclear types Table 1 shows the number of households in a typical village *

Table 1

Type of household		No of households in a typical village
1 Small (0 – 3 members)		33
2 Medium (4 – 6 ,,)		44
3 Large (7 – 9 ,,)		17
4 Very large (9 +)		6
	Total	100

The Class Structure

The rural communities are generally found to be grouped into classes of landlords, peasant proprietors, tenants and agricultural labourers along with strata of artisans and a group of moneylenders and traders The class structure can be summed up as follows. (1) Agricultural landowners—22.2 per cent; (2) Agricaltural tentants—27.2 per cent. (3) Agricultural labourers—30 4 per cent, and (4) Non-agriculturists—20.2 per cent.

The variations in land holdings are also considerable as could be seen from Table 2 The medium cultivators, numerically two-fifths of the cultivators, have less than a third of the sown area under them. There is an even steeper descent in the case of small cultivators, the sown area under them is just a little more than a tenth of the total area sown

Table 2*

Size		No of Holdings
Below 1 ha		35,682
1 to 2 ha		13,432
3 to 4 ha		10,681
4 and above		10,698
	Total	70,493

* *All India Report on Agricultural Census*, 1970–71, Government of India, Ministry of Agriculture and Irrigation, New Delhi, 1971, p 113

* Cf A R Desai (ed), *Rural Sociology in India*, p 113

Besides the inequalities in land holdings, there is a sizeable section consisting of the socially and economically weak. A broad composition of such groups could be seen from Table 3

Table 3**

	Group	Percentage of total to Rural Population
1	Scheduled Castes	16 05
2	Scheduled Tribes	8 37
3	Agricultural Labourers	10 38
4	Small Farmers	3 70
5	Petty Producers and Artisans	1 09

** *Census of India*, 1971 Series I, India. Part II A (ii), Union Primary Census Abstract, Registrar General and Census Commissioner, New Delhi, 1971

The Leadership Patterns

As one of the major aspects of social structure, leadership has received a good deal of attention from scholars Studies of patterns and processes of rural leadership reveal some interesting trends S C. Dube, for example having analysed the traditional structure of authority in the village, came to the conclusion that the ascriptive order is slowly admitting status based on achievement A R Desai has concluded that the upper castes and the classes still dominate the village It has been further pointed out that power structure tends to favour those who can control the economic expectations of the people. Daniel Thorner's study indicated that the leadership with vested interest has succeeded in diluting the implementation of various land reform laws According to M. N Srinivas, a number of elements such as numerical strength, economic and political power, ritual status, western education and occupation are alternatively found among different castes in a village and a caste enjoying all or most of them can have decisive influence

A review of the available literature on the trends of leadership in villages does not clearly indicate a set pattern. The pattern of leadership differs from one area to another, while in some parts of the country the traditional leaders continue to play a dominant role in various aspects of socio-economic life, in others the existing power structure is undergoing changes. It has been pointed out in several studies that the old leadership is gradually getting replaced by a new one on the basis of merit.

The Changing Scene

As a result of a number of measures that have been initiated by the government with a view to bringing about transformation in the socio-econo-

mic life of the rural people, the rural social structure is undergoing significant changes Although, the changes in village life are so rapid that their nature and direction cannot be indicated precisely, an attempt will be made here to highlight some of the major trends. The factors which have contributed in facilitating the process of change can be enumerated as follows:

1. Legislative measures to abolish *Zamindari* and Inamdari Systems;
2. Measures to change the conditions of tenancy;
3. Establishment of Panchayati Raj and other democratic institutions,
4. Introduction of community development and national extension services;
5. Increased availability of means of transport and communication;
6. Increased educational facilities; and
7. Industrialisation, urbanisation and change in the pattern of agricultural production.

Some of the major trends of change in rural social structure are (1) increased occupational mobility, (2) change in value systems, (3) emergence of new leadership oriented to different development programmes, (4) changes in agrarian relations, and (5) changes in family structure and institutional life of people

The numerous developmental programmes which have been initiated from time to time have a profound impact on the social structure As stated earlier, the broad trends are to be seen in terms of joint family caste structure and village organisation and relationship between villagers and government

A common feature of the land reform measures is that they set a limit to the amount of land which any family could own. As a result of this provision, there is a tendency among the members of a joint family to split into nuclear families lest they be restricted to a holding uneconomical for a large family group. Thus, the consequence of land reform tends to hasten the push towards smaller families with some consequent decline in agricultural efficiency.*

The various developmental programmes and other measures outlined above have all had their effect on the village caste relations. But the criteria of ritual ranking have not generally changed—meat eating and menial services still carry the stigma of lower class. While some taboos particularly in respect of food, etc are gradually disappearing, other rituals such as intercaste marriages still remain unaltered Further, there is a tendency towards

* Cf David G. Mandelbaum, "Social Organisation and Planned Cultural Change in India" in *Rural Sociology in India.* A R. Desai (ed), Popular, Bombay 1974, p 694.

levelling of economic differences among the village people. The lower castes, therefore, have started gradually bargaining for getting both economic and ritual status by using their strength of franchise The levelling effect has, however. not been positive for some sections. For example, the lower castes, those who are mainly landless labourers, have not gained much from different projects such as irrigation and land distribution They, therefore, continue to remain economically as well as socially disadvantaged. The gap between them and the other villagers, according to some studies, has actually widened.

The change in the role and functions of caste has effect on village social organisation as well as on agricultural output Thus the *Jajmani* system of traditional, personal, exchange relations is being replaced by contractual, impersonal and monetary relations Many cultivators who could depend upon these traditional ties whenever required can no longer have labour without offering cash payment on competitive basis

In the traditional system, caste provided for division of labour. it clearly stipulated how and when the various divisions cooperated and are rewarded. With the loosening of this system, no alternative plan for an effective cooperation for economic purposes has been traced out

Today, because of impact of technology, the agricultural economy is gradually changing into industrial and monetary economy, as a result caste system is also changing. Under the impact of modern technology, hereditary character of occupations is gradually getting loose. At the same time, changing economy is also motivating individuals to take up new occupations As a new occupational structure is emerging, which is not in consonance with the traditional occupational structure, occuptional hierarchy is replacing the age-old occupational unity of the caste. Consequently, the horizontal unity of caste is losing its significance. The traditional caste inter-dependence, because of which members of different castes were tied together is also changing Due to the impact of monetary economy, the traditional roles and obligations enjoyed by each caste are in the flux of change. The technology and industrialisation together with urbanisation have changed the village economy by tying it to the industrial economy. The rapid growth of industries required new material and labour, for which the villages worked as supplying sources. Growing industrialisation, commercialisation of agriculture. emergence of new occupations and services have indirectly generated change in caste interdependence

However, this is not to suggest that only economic changes have brought about changes in inter-caste relations Economic changes have also provided a base out of which many corresponding changes have emerged F G Bailey, for example, has pointed out how economic frontiers of caste have been changing as a result of which changes have been creeping into the traditional inter-caste relations Because of growing impact of technology and economic

opportunities, many old occupations fell in disuse and many have assumed new significance Abolition of zamindari and legal-political recognition of equality of all castes has generated new cleavages in inter-caste relations and motivation in the psychological make-up of the villagers. Spread of education has also facilitated this process of change Growing contact with urban centres has also been responsible for increasing mobility which has brought about changes in inter-caste relations Thus, it may be pointed out that a complex of forces generated by industrial, technological and urban forces are today changing the traditional caste symbiosis

Although, as a result of increase in industrialisation a number of features of caste have disappeared, it has not resulted in its complete disappearance This is apparent from the fact that though we have developed a number of norms related to caste, caste lobbies are increasing very fast at different levels of politics This can be seen in the Parliament, legislatures and in panchayati raj bodies then, in our day-to-day life, the role of caste is somewhat duel. A person may pose himself most modern in urban centres, but as soon as he goes back to his village, he would strictly adhere to the prevailing norms of his caste The trends in the role of caste suggest that caste is not going to disappear, rather it will come to the surface again but in a different form. Already, one can see that the castes which were given special privileges are not prepared to give them up Even if economic development takes place to a reasonable level, caste is bound to play its role

Historically speaking, caste has all along played a very important role in terms of providing stability and continuity to our traditions. It has given an unique to our civilisation and has provided division of labour and social solidarity Perhaps, it was due to caste system that our civilisation could not transcend the institution of 'slavery' like any other country in the West. The rigid caste system which existed in some periods of history has, however, been diluted from time to time by the reformers. What M.N. Srinivas says about 'Sanscritisation' and 'Westernisation' hold good in the context of present situation

The status structure is also in a fluid state While still clinging to the traditional modes of earnings, the villager is experiencing the impact of technology and changing economic patterns Pressure on land is continuously increasing and the basic structure of family is also changing The artisan castes can no longer depend for survival on their traditional occupation and, therefore, they migrate to the nearby city or, if possible change to an alternative occupation. Because of the availability of new channels of rural finance the hold of the high caste people or the moneylender is gradually diminishing. Although the recent changes in land ownership laws have affected the rights of the big landlords, they still have wealth and power in the society The breakdown of the status relations has deprived the artisan elements of

the village of concessions in kind which helped now and then to relieve them from chronic distress

A significant change is observed in the role of the village organisations such as the panchayat The traditional panchayats were arbitrary and their prime function was to regulate social life The newly created statutory panchayats. however. are supposed to be innovative working for changes rather than exercising social control As a result new social environment which is not so conducive for joint efforts based on caste fraternity is emerging Functionalism is on the increase and as a result some of the programmes are getting affected

On the whole, the available empirical evidence clearly shows that the power structure of villages is both traditional and modern The aspects of modernity are seen in terms of adult-franchise, which presupposes the quality of achievement It also emphasises on universalistic approach because all people have equal opportunities without any discrimination on the basis of caste or creed. People are becoming politically conscious and the traditional power groups are assuming new dimensions by transcending particularistic loyalties to caste or kinship But, at the same time, the traditional elements continue to maintain their hold in the total social structure. For example, the dominant castes. through faction-ridden, still maintain their prerogatives

The social structure of rural India, therefore, presents a mixed picture wherein tradition and modernity exist side by side As K Ishwaran has, in this connection, rightly stated "One is struck by the remarkable ability of the village community to preserve tradition while accepting change".*

* K Ishwaran, *Tradition and Economy in Village India*, Allied, Bombay, 1966, p. 137.

POVERTY AND UNEMPLOYMENT IN RURAL INDIA

P. T George

In recent years there has been a widespread discussion on rural poverty, national and international though the problem of poverty is not a recent phenomenon As early as in 1870, Dadabhai Naoroji raised the issue of Indian poverty and attributed it to exploitation by Great Britain According to him the per capita national income in India was only 40 shillings as compared with £ 30 in Great Britain. He argued that this occurred chiefly in four ways *(i)* excess of exports over imports consistently in favour of Great Britain, *(ii)* heavy taxation, without compensating investment for development of the economy of this country. *(iii)* moral drain whereby the country failed to gain either in experience or in qualitative improvement of its population. and *(iv)* heavy home charges under which large sums were transferred to Great Britain

Dadabhai's theory was accepted by contemporary Indians though the British had their own counter arguments Romesh Dutt, an eminent civil servant, while agreeing with Dadabhai's theory also pointed out that the economic and trade policies of Britain were always calculated to go against India and that the land tenures introduced by them wrought havoc on India's toiling masses Industries that existed collapsed and people crowded into agriculture, the frequent famines and economic depressions drove more and more agriculturists into destitution.

Naturally, decisions taken by the colonial power were always in its favour. Indian agriculture was so manipulated as to subserve the interests of the British industries

But in a recent study, Angus Madison, an American scholar, while examining the 'Historic Origin of Indian Poverty' argued that though the 'drain' and exploitation by the British could have contributed to poverty, the phenomenon was very much there even during the Moghul period, when the masses were absolutely poor However, a point conceded by him was that, had the British cared to develop and strengthen the economy, the position would not have been as bad as it was when they left the country.

Concepts of Poverty

The merits or otherwise of this historical perspective apart, it is relevant here to note that the concept of poverty itself has now been more closely examined and understood than in the past It can be explained from a number of angles

First, as was done by Dadabhai Naoroji, the per capita income of a community can act as a norm for quantifying poverty. To use this norm for identifying the poor within a community, it is necessary to have a complete picture of the per capita income for different groups of people Such data do not emerge in the process of computation of per capita income This norm is more readily used for making international comparisons, because the higher the average per capita income the richer the state is It is sometimes difficult to make direct comparisons of this type because of the differences in the conceptual and methodological approaches followed by different countries. In spite of these limitations, the per capita income still remains a useful norm for comparing the relative position of the countries while making international comparisons.

Secondly, studies in national product made by Colin Clarke and Simon Kuznets incidentally led to some broad conclusions. It was found that where the per capita income was low, more people were engaged in the agricultural sector, on the other hand, the dependence of more people on manufacturing services and. other sectors was indicative of higher per capita income But to judge a country as poor merely on the basis of the number of persons dependant on agriculture would be misleading because countries like Sweden, Norway, New Zealand have high per capita incomes though a large proportion of their workers are engaged in agriculture.

Thirdly, poverty is a relative concept and carries meaning only when it is used to identify the different groups of people within the community who are well off and who are poor The average per capita income conceals widely varying levels of income This concept leads to the idea of income distribution. The greater the equality in the distribution of income the better placed will be that community.

Fourthly, poverty must be regarded as a general form of relative deprivation arising out of maldistribution of resources; this results in a group being generally unable to provide for the minimum consumption requirements or to participate in activities and have the living conditions and amenities which are customary in that society.

Fifthly, poverty, as a concept, is more easily understood if it is related to a minimum subsistence level, expressed in terms of money, that is necessary to maintain health and working efficiency. Taking into account the cost of living, a level of income can be arrived at which would be adequate to provide the minimum consumption level. Using it as the cut-off point, families can be identified as poor or otherwise This method has been used directly or indirectly for counting the poor in the country.

The Magnitude of Poverty in India

Several estimates of the magnitude of poverty in India have been made by economists. Taking price level of 1968–69, Dandekar and Rath put the

minimum requirement in terms of rupees at 324 per capita per annum in rural areas and 468 in urban areas On this basis, they estimated that 40 per cent of the rural and about 50 per cent of the urban population lived below the minimum requirement level

In 1962, the Planning Commission appointed an expert committee to examine the minimum level of income needed for a person This committee, taking into account the price levels of 1960-61, fixed Rs. 20 per capita per month as the minimum subsistence level Minhas, in his exercises, used this level and an alternative level of Rs 200 per annum per capita and, on the basis of the series of NSS data, estimated the number of poor in the country as indicated in Table 1

Table 1 Percentage and Number of Persons Below the Minimum Level of Living – Rural India

Year	Below Rs 240 p a		Below Rs 200 p a	
	Per cent	Number (million)	Per cent	Number (million)
1956–57	65 6	215	52 4	173
1957–58	63 2	212	50 2	169
1960–61	59 4	211	46 6	164
1961–62	56 4	206	43 6	159
1963–64	57 8	221	44 2	169
1964–65	51 6	202	39 3	154
1967–68	50 6	210	37 1	154

Source *Planning and the Rural Poor* by B S Minhas

Two aspects emerge from the above estimates (a) that the magnitude of the problem is very large, and (b) that by slight change in the level of subsistence income, the actual number below poverty line gets reduced

Again, by analysing the consumption expenditure pattern by fractile groups, Minhas showed that in 1967–68 the poorest 5 per cent accounted for only 1 48 per cent of the total consumption expenditure, while the richest 5 per cent shared 13 24 per cent of the total expenditure (Table 2) It also reveals that the concentration ratio of distribution of consumption expenditure declined from 0 32 in 1956–57 to 0 29 in 1967–68

Estimated Number of Poor in 1978

The Draft Five-year Plan (1978–83) used a somewhat wider concept of poverty. After taking into account the rise in the price levels it accepted a new norm of Rs 61 8 per capita per month for rural population and Rs 71 3 per capita for urban population, at 1976–77 prices, as the subsistence level. Using this, the population below the poverty line in 1977–78 was projected

Table 2 : Extent of Poverty
Percentage of Total Consumption Expenditure by Fractile Groups – Rural India

Fractile Group	1956–57	57–58	60–61	61–62	63–64	64–65	1967–68
Poorest 5%	1 36	1 37	1 46	1 35	1 51	1 47	1 48
5 to 10	1 89	1 88	1.94	1 87	2 07	2 01	2 02
10 to 20	4 67	4 67	4 80	4 84	5 07	4.99	5 01
20 to 30	5 75	5 62	5 80	5 71	6 14	6 07	6 08
30 to 40	6 70	6 61	6 74	6 81	7 15	7 05	7 09
40 to 50	7 74	7 66	7.65	7 94	8 17	8 11	8,13
50 to 60	8 91	8 75	8 77	9 16	9 33	9.51	9 29
60 to 70	10.35	10 11	9 99	10 59	10 72	10 67	10 68
70 to 80	12 21	11 98	11 71	12 53	12 43	12 45	12 46
80 to 90	15 11	14 84	14 78	15 43	15 08	15 18	15 15
90 to 95	9 55	9 48	9 53	9 69	9.27	9 36	9 36
Richest 5%	15 76	17 04	16 82	14 08	13 06	13.33	13 24
Concentration Ratio	0 32	0 31	0 31	0 31	0 29	0 29	0 29

Based on N S S Data Source . B S Minhas, Planning and the Poor

as 48 per cent in rural areas and 41 per cent in urban areas and for the whole country it was put at about 290 million In working out this estimate, a higher level of caloric requirement (2500 calories) was also presumed A revised level, at 75 per cent of the indicators was accepted as the modified poverty line below which 160 million people were identified The developmental strategy enunciated in the Plan was thus aimed at lifting above this revised poverty line a sizeable proportion of this segment by the end of 1987-88. The progress aimed at is shown in Table 3.

Table 3 : Percentage of Population Below the Poverty Line

	Below Poverty Line			Below 75% of Poverty Line		
	1977–78	1982–83	1987–88	1977–78	1982–83	1987–88
Rural	47 85	38 70	27 28	26 42	19 39	11 88
Urban	40 71	35 33	26 23	22 34	18 35	12 26
All-India	46 33	37 95	27 04	25 55	19 16	11 97

Even at the end of the 10-year period (1977–78—1987–88). there will still be 27 per cent of the population below the poverty line or 12 per cent below the modified poverty line This gives an indication of the magnitude of the problem

Causes of Poverty

Poverty is often attributed to the vicious circle of low income, low level of savings and low investment, leading to low level of employment and in-

[illegible] If we further proceed, the circle can be widened by taking into account [illegible] market imperfections, traditional technology and knowledge, [illegible] and concentration of economic power. If one tries to identify the poor, the unemployed and the underemployed, together, stand [illegible] in an over-populated agricultural sector underemployment is rampant and this is mainly due to low resource base especially land. Distribution of land is highly skewed in India as the data in Table 4 show.

Table 4: Distribution of Operational Holdings in 1971 (Agricultural Census)

Size Group	Percentage of No. of holdings	Percentage of total area
Less than 1 ha	50.6	9.0
1.0 ha to 2.0 ha	19.0	11.0
2.0 ha to 4.0 ha	15.2	15.5
4.0 ha to 10.0 ha	11.3	29.7
10 ha and above	3.9	30.9
	100.0	100.0

According to NSS (16th Round) data, Landless households in the rural areas constituted above 12 per cent (6.4 million rural households who neither owned nor operated any land) of the total rural households. According to the Rural Labour Enquiry 1974-75, agricultural labour constituted 25.3 per cent and all rural labour 30.3 per cent out of a total of 82.1 million rural households. Out of 72 million operational holdings 36 million are below one hectare in size. Even holdings up to 2 ha or 5 acres in some areas of the country cannot afford adequate income from corp husbandry, an income to lift them above the poverty line. Thus the poverty group in the rural areas is [illegible] identifiable as those who have very little land base and who are [illegible] underemployed or unemployed.

There is no doubt that the number of people below the poverty line, whatever be the norm one may adopt, is sizeable. With the growing population the pressure on land is increasing, as a result, the available productive [illegible] have to be divided among a larger number of persons. The Rural Labour Enquiries 1964-65 and 1974-75 testified to the decline in the number [illegible] wage-paid employment in agricultural operations (Table 5).

That such a decline has occurred at least in some parts of the country during the period [illegible] marked by the 'green revolution' is a significant fact that should be taken note of in planning for the future. The economy as a whole had attained a compound growth rate of 3.5 per cent and, during 1960-1977, in [illegible] it was 2.15 per cent, but the total wage paid days of employment [illegible] declined.

Table 5 : Estimated Number of Full Days of Employment 1964-65 and 1974-75 All India

	Estimated number of full days in									
	Wage Paid Employment				Self-Employment		Employment on salary basis		Total	
	Agricultural		Non-Agricultural		1964-65	1974-75	1964-65	1974-75	1964-65	1974-75
	61-65	71-75	64-65	74-75						
Agricultural Labour										
Men	208	185	27	25	30	33	1	3	272	216
Women	138	129	15	11	27	35	*	1	183	179
Children	167	145	35	26	62	78	1	5	280	254
All Rural Labour										
Men	183	160	52	52	31	33	2	5	277	250
Women	137	118	30	28	29	37	*	1	199	184
Children	156	133	31	38	64	73	2	5	267	254

Source : Rural Labour Enquiry 1974-75, GOI, 1978 (mimeo)

* Less than 0.50.

The declining value of the rupee in the past has further worsened the position of the poor. The agricultural wages (money wages), according to the Rural Labour Enquiry, rose substantially during 1964-65 and 1974-75 period (Table 6)

Table 6 : Average Daily Earnings of Labourers in Agricultural and Non-agricultural Occupations

(In rupees)

Categories of Households	All agricultural operations			Non-agricultural operations		
	1964-65	1974-75	Per cent increase over '64-65	1964-65	1974-75	Per cent increase over '64-65
Agricultural labour households						
Men	1 43	3 24	127	1 54	3 27	112
Women	0 95	2 27	139	0 92	2 12	130
Children	0 72	1 82	153	0 74	1.84	149
Rural labour households :						
Men	1 41	3 26	131	1 88	4 09	118
Women	0 84	2 28	156	1 18	2 34	98
Children	0.76	1 82	139	0 81	1 84	127

The increase in money income if converted into real income, becomes [illegible]. The cost of living indices for agricultural labour (general) rose from 143 (1960-61=100) in 1964-65 to 368 in 1974-75 If one calculates the real value, the earnings in 1974-75 were less by 10 to 15 per cent than the money income in 1964-65.

These points lead us to two main considerations : *(a)* that the major problems that need to be tackled to reduce poverty are unemployment and underemployment, and *(b)* that a rational wages and income policy should form an integral part of the future strategy. Mere generation of employment by itself will not lead to removal of poverty.

Unemployment and Underemployment

A clear understanding of the concepts of unemployment and underemployment is necessary before the policymakers can unravel the complex nature of the poverty-unemployment-inequality syndrome

Types of Unemployment

a. *Seasonal Unemployment* is associated with those types of operations [illegible] Agriculture and industries, that are dependent on raw

material from agriculture, are examples where seasonal unemployment prevails. This assumes significance when alternative avenues of employment are limited

(b) Technological Unemployment arises on account of introduction of new technology replacing human labour particularly when its availability is abundant

(c) Cyclical Unemployment. The classical economists always assumed a full employment equilibrium in the long run, given the supply of labour and capital. In comparison, Keynes held that an inadequate effective demand emerging from excess saving in the short-run results in situations where a part of the labour force has to remain involuntarily unemployed Under given conditions, the effective demand can go up with increase in real income and, consequently, the disequilibrium in saving and investment, which causes unemployment would gradually disappear and the upward movement towards full employment would start. Keynes' analysis may not be applicable to an underdeveloped economy with its chronic problem of underemployment and lack of capital resources

(d) Disguised Unemployment was first explained by Joan Robinson According to her, a person who is rendered jobless in the regular employment due to cyclical changes, instead of being completely idle, tries to eke out a living taking up odd jobs through which he earns much less than what he used to in his regular job The adoption of inferior occupation by the dismissed workers is termed as disguised unemployment, for which the remedy lies in taking the economy out of the trough — by raising effective demand. The terms underemployment and disguised unemployment have now become almost synonymous

(e) Structural Underemployment is largely due to the disproportionate growth of population in relation to the capital formation and growth of employment opportunities in non-agricultural sectors. This phenomenon exists in underdeveloped and over-populated countries In such situations, if some workers are removed from land, the agricultural production would remain more or less the same or might even rise with some adjustments. The marginal productivity of the labour in a situation of structural underemployment would be zero or near-zero

In development-oriented terminology, the terms 'disguised unemployment' and 'structural underemployment' have been used to explain similar situations. But essentially, they are different situations and, therefore, need to be treated differently. It may be found that the marginal productivity of labour in disguised unemployment (Joan Robinson's concept) is positive, whereas in the case of structural ,underemployment it is not

(f) Structural Open Unemployment signifies a situation in which a part of the labour force remain completely unemployed. Such unemployment

can be remedied by creating a greater volume of capital. Open unemployment in a predominantly agricultural country may be very small but constitutes a difficult problem. This is the type of unemployment termed as 'chronically unemployed' in the Draft Five-year Plan (1978–83) which was put at 4.37 million according to estimates based on the NSS findings for 1973.

Quantification of Unemployment

The rural labour force, at any time, is a function of the growth in population and the participation rate Participation rate is viewed often from the point of view of sex and age composition The factors that increase participation rate are expansion of male and female education, increasing pressure of inflation, desire for a better standard of living, increasing female participation due to late marriages, erosion of joint family and kinship ties and fall in dependency ratio Participation ratio declines when the age structure of population weighs heavily in favour of children and aged persons, increased number of years of schooling for children, minimum period of education prescribed for entering into working force and government's policy against child labour.

On the basis of different rates of participation, S Raghavachari (1974*) estimated the rural labour force The three possible assumptions are: *(i)* the rate of participation of rural labour force in the country will increase, *(ii)* the rate of participation accepted in the Draft Fifth Five-year Plan to be taken as constant till 2001 A.D, and *(iii)* the sex-age specific participation rate revealed by 1971 census should be taken as constant till 2001 A.D The three projections are shown in Table 7.

Table 7 : Rural Labour Force Actuals for 1971 and Projections for 1986 and 2001 AD
(in millions)

	Labour force excluding child labour					
	Projection I		Projection II		Projection III	
	Total	Rural	Total	Rural	Total	Rural
1971	170 0 (31 1)	138 6 (31 6)	170 0 (31 1)	138 6 (31 6)	170 0 (31.1)	138 6 (31 6)
1986	248 0 (33 8)	194.0 (34.7)	257.7 (35 2)	203.7 (36 5)	245.8 (33 5)	191 8 (34 4)
2001	339 9 (35.9)	249.9 (37 4)	328.9 (34 8)	243 5 (36 5)	334 0 (35 3)	244 0 (36 6)

Figures in brackets are participation rates

* S Raghavachari, "Population Projections 1976–2001", in Ashish Bose, *et. al* (ed). '*Population in India's Development* 1974, quoted in Report of the National Commission on Agriculture Part XIII, Rural Employment and Special Area Programmes, p 6

The broad indication from the three projections is that by 2001 A. D. the labour force is bound to increase by not less than 100 million in the rural areas, By 1986, it will be 55 4 million according to the first projection, 65.1 million according to the second and 53.2 million according to the third projection

Unemployment Estimates

While planning for employment, it is imperative to take into account the backlog of unemployment at any point of time and the number of new entrants that may join the labour force during the Plan period There was no firm estimate of backlog of unemployment when the First Plan was launched The limited data from the First Agricultural Labour Enquiry were uesd to provide the starting point Unemployment estimates at different stages were as given in Table 8

Table 8 : Estimated Unemployment in Different Plan Periods

(in millions)

	First Plan 1951–56	Second Plan 1956–61	Third Plan 1961–66	Annual Plans 1967 to 1969	The Ten-year period 1966 to 1976*
1 (*a*) Backlog of unemployed at the begining	3 3	5 3	7 1	9 6	9 6
(b) New entrants into labour force	9 0	11 8	17 0	14 0	43 0
Total	12 3	17 1	24 1	23 6	52 6
2 Additional Employment likely to have been generated					
(*a*) Non-agricultural sector	5 5	6 5	10 5	9 0	16 0
(b) Agricultural sector	1 5	3 5	4 0	2 0	9 0
Total	7 0	10 0	14 5	11 0	25 0
3 Backlog of unemployed	5 3	7 1	9 6	12 6	27 6

Source R B I. Bulletin 'Growth of Employment 1950–51 to 1969', December 1969
* Draft Five-year Plan 1978–83

There is considerable literature on the size of unemployment in the country and the ways and means of arriving at a reliable estimate In an economy where underemployment predominates, it may be pointless to count the people unemployed at any given period · one who is employed in the reference

period (say week) may not be employed for most part of the year. The concept of 'weekly unemployment' was defined as the number of persons who did not find work even for an hour during the survey week and were searching or were available for work The 1973 Survey by NSS showed that the number of persons unemployed on this basis was 10.1 million and the size was estimated at 11 2 million in 1978 To overcome this lacuna, the method of estimating person-days or person-years for quantifying unemployment was used where unemployment was measured by the number of days This person-day unemployment was 130 0 million days per week in 1973 which was equivalent to 18.6 million persons being unemployed on a typical day. Assuming the same rate, the estimated unemployment in March, 1978 was placed as equivalent to 20 6 million persons — 16 5 million in the rural areas and 4.1 million in the urban areas

There are other estimates also For instance, Rajkrishna estimated the number of unemployed in 1971 at about 21 5 millions — 19.3 millions in the rural areas and 2 2 millions in the urban areas

What is significant is that the size of the problem does not change substantially, whatever be the methods adopted for quantifying unemployment, and every indication is that the size is likely to grow unless effectively tackled, Available data indicate that the chronically unemployed persons (excluding the underemployed in the rural areas) rose from 1 73 million in 1971 to 1 83 million in 1973 and to 2 0 million in 1978 · it is likely to reach 2 2 million by 1983

The rates of unemployment by daily status varied from state to state. The states of Tamil Nadu, Andhra Pradesh, Maharashtra, Bihar, Kerala and West Bengal, taken together, accounted for 67 per cent of the number of person-days of unemployment in the country in 1972–73

Development without adequate employment generation was the experience so far. The Draft Five-year Plan (1978–83) opens with a review of the progress made in the various sectors of the economy and notes that the growth of employment did not keep pace desired and the benefits of growth have gone mainly to affluent sections to the exclusion of sections like the Scheduled Castes and Tribes

A glance at the sectoral employment in the past would show that in spite of development that took place in recent decades in the manufacturing sector, the share of agriculture in the work force has not diminished at all It was 73 per cent in 1921, 73 per cent again in 1961, and 73 8 per cent in 1971. The mining and manufacturing sectors also did not register any difference : its share was 9 per cent in 1921, 10.4 per cent in 1961 and 9.8 per cent in 1971 (Table 9)

Table 9 : Distribution of Work Force · 1921–1971

Census Year	Agriculture*		Manufacturing		Others		Total	
	No	Percentage	No	Percentage	No	Percentage	No	Percentage
1971	167.33	73 8	22 37	9.8	37 17	16.14	226.87	100 0
1961	137 80	73 0	19 61	10 4	31 26	16. 6	188.67	100 0
1951	101 92	72 8	13.02	9 3	25.06	17. 9	140 00	100 0
1611	89 54	74 0	11 13	9 2	20.33	16 8	121 00	100 0
1931	89.23	72.0	10 79	8 7	23 93	19 3	124 00	100.0
1921	87.72	73 1	10 80	9.0	21 48	17 9	120 00	100.0

* including animal husbandry, fishery and poultry work force.

Source . Draft Five-year Plan 1978–83. Government of India, Planning Commission, 1978, p 95

The growth in the manufacturing sector has not resulted in comparable growth in the employment absorption mainly due to the fact that the product-mix and technology-mix have been capital intensive such that employment did not grow. pushing the country deeper and deeper into the unemployment trap. Between 1961 and 1971, for example, in the modern factory sector investment increased by 139 per cent and output by 161 per cent but employment increased only by 71 per cent Out of the estimated 29 5 million persons that would enter the labour force by 1983, hardly 2 7 million workers would be absorbed in the organised sector By past experience only 10 to 11 per cent of the new entrants have chance of getting absorbed in this sector and the remaining 89 per cent have to be taken in by the agricultural sector

The unorganised sector accounted for 91 per cent of the total work force. However, a significant change in the sector was that the number of agricultural workers increased by 19 million during the decade 1961–71. Since the agricultural labour population bears the largest incidence of rural poverty and underemployment any increase in its size will reflect the increase in poverty and unemployment

Characteristics of Rural Unemployment

Certain significant features of rural unemployment may briefly be recalled here before the problem of employment planning is taken up The basic problem is that rural unemployment takes the shape of underemployment and manifests chiefly among self-employed workers engaged on their small farms or in the household occupations Seasonality of employment in agricultural sector is another important aspect which affects different sections of the rural population differently The mobility of labour in the rural areas is very much limited,* particularly that of women and children and this phenonenon would call for an attractive wage policy. A low level of mobility would also necessitate creation of employment within negotiable distances from the village. Another aspect is the composition of rural labour force by sex and age-group. For instance, NSS data reveal that the proportion of unemployed females has been higher than that of men and their mobility also was limited. The mobility of small landholders was less than that of marginal farmers, landless labourers and artisans.

Employment Policy in 1978–83 Plan

Employment is accepted as a function of investment and growth in the various sectors A rate of growth of 5 per cent in the large-scale industry would result in 2.5 per cent growth in employment Though, in the past, the growth

* According to N S S. in 1970–71 of the small cultivator households 46 5 per cent were willing to seek alternative regular wage employment and 27 5 per cent were willing to leave villages in search of employment Among the landless, workers households, 57 3 per cent were willing to take up alternative regular wage employment and 36 9 per cent were willing to leave the village

rate in the industry was only 5 per cent. it is anticipated that during the Plan period large and small industry would grow at 6 to 7 per cent per annum and employment at 3 to 3 5 per cent every year Even if this materialises it will absorb only 0 3 per cent of the labour force So the hope for the future lies entirely in improving the employment and income-generation in the unorganised sector, mainly agriculture The tempo even in agriculture would depend upon overall growth taking place in the economy The Planning Commission, therefore, formulated an employment policy with the following features *(i)* an overall growth rate of 4 7 per cent in the economy; *(ii)* accelerated implementation of land reforms. differential input supply favouring small farmers, minimum-needs programme and public distribution system all aimed at redistribution of purchasing power in the hands of the weaker sections; *(iii)* public investment in rural infrastructure and social services to increase employment at construction phase and also to provide continued employment, and *(iv)* optimum allocation of new capacity between different techniques. *i e* . selected mass employment consumer goods sectors so as to ensure growth of employment in each of these sectors

On the basis of these approaches the Planning Commission estimated the prospects for employment generation during the Plan period (Table 10).

Table 10 : Projected Growth of Employment : 1977–78/1982–83

Sector	Employment		Increase	Annual Growth (Employment)	Annual Growth of Value Added
	1977–78	1982–83			
	(million person years)			*(per cent)*	
1 Agriculture and allied sectors	99 21	121 98	22 77	4 22	2 76
2 Mining	0 90	1 35	0 45	8 45	9 07
3. Manufacturing	22 74	31 65	8 91	6 83	4 67
4 Others (including services)	44 22	61 35	17 13	6 77	6 52
Total	167 07	216 33	49 26	5 30	4,70

Source Draft Five-year Plan, 1978–83, p 87

Assuming that the anticipated levels of production will be achieved, the Plan effort is likely to create 49 3 million additional person-years of employment Agriculture and allied sectors would account for 22.8 million person-years and manufacturing for 9 million person-years However, the projections lean heavily on the possibility that economic growth would lead to growth in employment Hitherto it was found that the latter lagged very much behind the former. To expect all of a sudden a growth rate of 4.7 per cent to generate 5 30 per cent growth in employment is unrealistic Even if

the new technology-product mix could be worked out for all sectors and industries, its implementation would take some-time and it will be longer still for the expected rate of growth in employment to reach 5 3 per cent

Programme and Planning for Employment

A programme for employment generation should meet all the limitations discussed thus for. Rural employment prospects depend very much upon the ability of agriculture to absorb the additional labour force besides improving the level of employment and income of persons who are already under-employed

Employment programmes in the rural sector fall into *(a)* those related to agriculture and allied activities and *(b)* those in the non-agricultural sector Improved irrigation facilities, and improved technology in dryland farming promise to increase employment opportunities Other related activities which would absorb additional labour and produce greater income are animal husbandry, forestry, and fishery development Impact of mechanisation on labour can be positive up to a limit. An appropriate mechanization programme which would accelerate agricultural operations and create more employment than that is displaced needs to be worked out In the agricultural front one could also include the benefits arising from implementation of land reform measures which give for the landless greater access to land. Further, utilisation of idle family labour holds out good promise if land is effectively distributed to the landless.

In the non-agricultural sector, employment generation rests on: *(a)* development of infrastructure including irrigation, rural electrification, rural roads, housing. rural institutions, agro-service centres, etc, *(b)* development of tertiary and service sector covering marketing and trade, processing, storage, distribution, transportation and professional services, and *(c)* growth of village and small-scale industries including khadi, handloom and handicrafts

To achieve the expected level of employment generation in the rural areas more financial outlay and capital formation than that was ever achieved in the past, are necessary The increase in the outlay in 1978–83 Plan over that in the Fifth Plan on agriculture and allied activities was over 99 per cent and for irrigation and flood control, it was 128 3 per cent, augering well for increased employment generation

To achieve the objeetives of removal of inequality and improvement in the standard of living mere generation of employment is not enough The employment should provide the necessary income which will have to be related to the rising cost of living The minimum wages prescribed for agricultural operations should be strictly enforced in the rural areas To generate a minimum subsistence level of income from employment, wages

will have to be progressively revised and enforced failing which, the objective of removing poverty would still remain a distant goal

Another area in which greater attention is needed refers to an effective redistribution of land through land reform measures The ceiling laws as exist today have failed to yield the surplus land adequate to provide the minimum land base for a substantial section of the landless population Capital-augmenting and asset-augmenting measures that have been launched under the various special programmes would be meaningful only if these benefits go to the really weaker sections If land distribution and the implementation of the special programmes are coordinated it would help in improving the income-generating capacity of a large number from the weaker sections It would have a beneficial effect on the demand for mass consumer goods necessitating further investment in their production. This would help to reverse the vicious circle, to one of greater demand—more income and employment—greater investment

STATUS OF AGRICULTURAL LABOUR

P T George

Demographic trends from 1901 to 1971 indicate the steady rise in the number of agricultural workers and agricultural labour over the year (Table 1)

Table 1 : Agricultural Labour as Per Cent of Total Labour Force/Agricultural Workers
(in millions)

Year	Total labour force (A)	Agricultural workers (B)	Agricultural labour	Agricultural labour as % of A	B
1901	110 71	69 21	17.26	15 59	24 94
1911	121 30	82 53	24 06	19 84	29 15
1921	117.75	81 25	19 65	16.69	24 18
1931	120 67	79 78	22 11	18 33	27.72
1951	139 42	97 24	27.50	19 72	28 28
1961	188 57	131 05	31.52	16 71	24 05
1971	180 37	125 67	47 47	26 33	37 79

Source Office of Registrar General of India, Government of India

The rural households increased from 70 4 million in 1964–65 to 82.1 million in 1974–75. The number of rural labour households, including non-agricultural labour, was 17.9 million (25 43 per cent) in 1964–65 which rose to 26 32 million (30 26 per cent) in 1974–75 an increase of 8 42 millions during a decade

Agricultural labour households formed 21.79 per cent of the total rural households in 1964–65 and 25 26 per cent in 1974–75. There was an increase in the percentage of households with land during this period, *i e.*, from 9 57 per cent to 12 43 per cent of the total rural households The percentage distribution of agricultural labour households holding land by size of landholding is shown in Table 2

While 75 per cent of all the agricultural labour households hold land less than 1.50 acres in extent, 81 per cent of Scheduled Caste agricultural labour households have holding less than 1.50 acres in extent. In this respect, agricultural labour households of Scheduled Tribes seem to be slightly better (63 3 per cent), but this conceals the poor quality of their land

The average size of the agricultural labour households is becoming larger — it was 4 47 in 1964–65 and 4 74 in 1974–75 Taking all rural labour households, the average size rose from 4.51 to 4.70 during the same period.

Table 2 Agricultural Labour Households (1974–75) by Size of Landholding · Percentage Distribution by Size of Land Cultivated

(in acres)

	0 01 to 0 49	0.50 to 0 99	1 00 to 1 49	1.50 to 1.99	2 00 to 2 49	2 50 to 4 99	5 00 and above	Total
All Agricultural labour	40 1	19 9	15 7	5 3	7 4	8 4	3 2	100
Scheduled Castes	47.1	20 4	14 7	4 6	6 2	5 1	1 9	100
Scheduled Tribes	28 3	16 1	18 9	7 2	11.7	13 2	4 6	100

Source Rural Labour Enquiry, 1974–75 Summary Report (mimeo.), p 24

This demographic trend of these weaker sections needs to be borne in mind while planning for their economic betterment.

The relatively steady growth, though at a lower rate after 1966. in agriculture was expected to improve the employment and income raising opportunities of agricultural labour. In parts of the country, the green revolution was a reality, which was expected to have improved the income and employment opportunities of agricultural labour. But the findings of the Fourth Labour Enquiry revealed that, at the all-India level. the number of days of wage-paid employment has declined and the rising prices in the rural areas. measured in terms of general cost of living index for agricultural labour, has completely wiped out the benefits of higher money wages in 1974–75 compared with the position in 1964–65 (Table 3) State-wise data are not available yet.

Table 3 : Agricultural Labour Households – Extent of Wage-paid Employment (in days) in Agricultural Employment

	1950–51	1956–57	1964–65	1974–75	Percentage increase or decrease in 1974–75 over 1964–65
Male workers	189	194	217	193	— 11 0
Female workers	120	131	149	138	— 7 4
Average daily earnings of workers engaged in agricultural operations (Rs)					
Men	1.09	0 96	1 43	3 24	+ 127
Women	0 68	0 59	0 95	2 27	+ 139
Children	0 70	0 53	0 72	1 82	+ 153

Source · Summary Report, Rural Labour Enquiry, 1974–75

The total number of days of employment, (taking into account employment in agricultural, non-agricultural occupations as well as self-employment),

declined from 272 in 1964–65 to 246 in 1974–75 This decline is difficult to explain in the context of the general development that has been taking place in agricultural production, particularly after 1967

The real income of the male agricultural workers declined from Rs 1 43 in 1964–65 to Rs 1 26 in 1974–75 with the 1960–61 price level as 100 The average household income of agricultural labour was Rs 447 per annum in 1950–51 which declined to Rs 437 in 1956–57. The money income in 1964–65 was Rs 660 19 which, if deflated by the price rise (with 1960–61 as base), was only Rs 461 16 In the absence of complete data for 1974–75, it is difficult to find the relative position in that year A rough estimate showed that the money income in 1974–75 per agricultural labour household was Rs 1,404 The abnormal price rise during the period actually negated this improvement reduced to 1960–61 price level the income was only Rs 381.52 per household in 1974–75 On the same basis the per capita income declined from Rs 103 16 in 1964–65 to 80 48 in 1974–75

Indebtedness

The 1974–75 Rural Labour Enquiry revealed that the agricultural labour households in debt increased to 66 per cent in 1974-75 from 61 per cent in 1964–65. The percentage of Scheduled Castes households in debt was 71 in 1974-75 as against 66 in 1964–65 The average debt per indebted agricultural labour was Rs 584 in 1974–75 as against Rs 244 in 1964–65, an increase of 135 per cent The dependence on moneylenders increased significantly during 1974–75 The survey revealed that the rural labour households, being at the lowest rung of the rural society, could not derive substantial benefits from the cooperative movement and were depending upon traditional sources of credit Among the agricultural labour households literacy was about 20 per cent

In the past, the per capita net national product showed improvement considering the total population, but when the rural and urban per capita net national product were examined separately it was found that in the urban sector there was a steady rise, while it declined in the rural areas. The relative position is shown in Table 4

The position of agricultural labour is worse than that of the rural population as a whole in 1964–65 the per capita income of agricultural labour was only 59 per cent of the average rural net national product, and this declined to 42 per cent in 1974–75.

All the available indicators show that the position of agricultural labour had not improved in the last decade (between 1964–65 and 1974–75). If anything, their position had only declined, in spite of all the developmental effort in the past

Table 4. Per Capita Net National Product—Rural and Urban Break-up at 1960-61 Prices

(in Rupees)

Year	Aggregate per capita NNP at 1960-61 prices	Net National Product per capita		Average per capita income of agricultural labour
		Rural	Urban	
1950-51	252 9	197 8	399 4	103 95
1955-56	276 3	208 7	450 8	99 42
1960-61	309 2	216 0	554 4	—
1964-65	335 1	220 4	639.5	103 69*
1970-71	353 0	219 0	711 5	—
1974-75	341 4	191 1	745 1	80 48*

* at 1960-61 prices

In social status, agricultural labour suffers from several handicaps. It could be seen that one out of every two agricultural labour households belongs to Scheduled Castes or Scheduled Tribes The percentage of landless agricultural labour is more among the Scheduled Castes than among the others The redistribution of land under land reform measures did not touch the fringe of the problem They remain as untouchables, illiterate and unorganised such that the socio-economic and political pressures that they could exert on the day-to-day affairs of the state are very limited. Removal of poverty is an ideal that the Plans have accepted, but the goal remains farther than ever as no significant change has been brought about in spite of all the concern expressed in the past Five-year Plans This has been made amply clear by the admission that the number of persons below the poverty line, as computed for the Sixth Plan framework, was around 290 million (48 per cent of the rural population and 41 per cent of the urban population) in 1977-78

Agrarian Legislation and Agricultural Labour

There is no specific wayout for agricultural labour except by raising their resource base. Providing more employment is another possible method to improve their economic condition but unless a wage policy is evolved that will take care of the constant price rise, their average real incomes will not improve. The worst feature of the agricultural labour is that they have very limited bargaining power These are some of the areas that have been touched by legislative measures in the past.

Tenancy reform measures were expected to benefit the tenants by regulating rates of rent and promoting direct ownership of the tenanted land. In this direction some progress has been made in the past But the defect is that they did not benefit the agricultural labour because they were not tenant-cultivators, and those who owned land had too small scopic holdings to

permit any tenancy The restrictions on leasing out made it difficult for the agricultural labour to gain access to land, nor were they free to lease out their land and move out to other jobs with confidence It seems, therefore, that the agricultural labour have not been benefited to any great extent by the conferment of ownership right on tenants The little improvement in the percentage of agricultural labour with land that was noted by the Rural Labour Enquiry 1974-75 could be attributed to the distribution of large areas of cultivable waste land throughout the country But such land needed heavy investment for making it cultivable and there was no coordinated effort worth mentioning to provide the wherewithal to the beneficiaries of distribution of cultivable waste land

Ceiling on landholdings was the other measure that was expected to benefit this group Under the earlier ceiling laws over 10.68 lakh people were reported to have gained land and a similar number under the revised ceiling laws However, much of the surplus land that they got was the cultivable waste and the beneficiaries were left without supporting measures with the result that the net advantage for the agricultural labour was rather illusory

Some steps were taken to regulate alienation of land by Scheduled Castes and Scheduled Tribes in order to check the prospects of their becoming progressively landless. But such measures have not been found adequate to improve the already poor land base of this section of the rural population

Thus, agricultural labour has gained very little by land reform measures in the past and with the present policy on ceiling, it is not likely that even a very effective implementation would bring much benefit to the agricultural labour.

Debt Relief and Bondage

The debt relief measures, if effectively supported by other sources of credit, may help agricultural labour. But what has happened is that the alternative sources of credit to be nowhere though debt relief measures were launched in most of the states Another significant measure in recent years was the abolition of bonded labour How far this was a blessing to the agricultural labour is a moot point Under the prevailing monopoly position enjoyed by the landowner and with no alternative means of livelihood available for the bonded labour the landowner-labour relationship cannot suddenly be broken up without demaging the already precarious position of the agricultural labour It may not be correct to assume that by passing an enactment, the position of agricultural labour can be improved as they are caught up in the whirl pool divergent of social and economic forces which cannot be easily controlled by the state without changing the present structural set-up.

Minimum Wages Act

The Minimum Wages Act, 1948, as extended to agricultural workers is yet another example of good intentions in favour of the weaker sections Under this Act, the states were required to revise the minimum wages payable to the agricultural labour. The past experience has been that the cost of living index was rushing ahead while the revision of minimum wages was progressing tardily Even where the wages were revised, it was hard for the agricultural labour to get it, except in a very few cases as in Kerala or in Punjab What helped in Kerala was the unionisation of agricultural labour while in Punjab it was the scarcity of labour that pushed up the wages. The machinery for implementation of minimum wages for agricultural labour is practically non-existent and where it exists it is not effective The rising cost of cultivation arising from the rising prices of other inputs make the landowner resist the rise in agricultural wages and the lack of bargaining power on the part of the agricultural labour helps the landowner to have his way The 1974–75 labour enquiry showed that hardly 2 per cent of agricultural labour in the country was aware of the existence of the Minimum Wages Act and the wages fixed thereunder

Organisation of Rural Labour

That organised labour, whether in industry, plantations or agriculture, have been able to improve their bargaining power is by itself an adequate reason for getting agricultural labour organised. In practice, however, they are at a disadvantage In the first place, they work in ones and twos and not in groups as workers in industry or plantations There is no room for communication of grievances, and ventilation of complaints and no chance for experiencing the advantages of organisation Their illiteracy shuts them from the outside world and their philosophy of poverty makes them to accept their present plight Besides, the landowners are quick at putting down any attempt at organised endeavour by agricultural labourers. They are better informed, have resources, and enjoy a sort of monopolistic position that they can stiffle easily any attempt on the part of the agricultural labour to organise themselves The class and caste structure of the agricultural labour is another impediment in getting them organised. Moreover, there is hardly any chance of leadership emerging from among them and outside leaders have more often than not selfish ends in their minds instead of the good of the agricultural labour. When such leadership gets into the field even if organisations set up, they are easily subdued or bought off by the landowners For these and other reasons agricultural labour by and large remain unorganised The Rural Labour Enquiry 1974–75 revealed that only about 1 per cent of the agricultural labourers were members of trade unions in the country.

Kerala Agricultural Workers Act

That the agricultural labour can gain considerably through some degree of politicisation was proved in Kerala Not only did the agricultural labour get organised but they also got a progressive enactment included in the statute book The Kerala Agricultural Workers Act, 1974, has generated much interest in other parts of the country and open discussions were held on the adaptability of such law in other states. The Kerala Act, conferred on the agricultural workers benefits such as security of service, regulation of working hours, prompt payment of wages and provident fund The Act provided for setting up of Agricultural Workers Welfare Fund and made statutory provisions for settlement of dtsputes on the lines of those contained in the Industrial Disputes Act Besides, the Act also provided the machinery for settlement of such disputes

Still a long way has to be covered before such a law is implemented even in Kerala But the fact that a legislation that takes into account the problems of agricultural labour in itself is a major achievement

Development Approach

The struggle for progress is a long drawn-out one But the immediate problems of agricultural labour cannot brook any delay These are their poverty and unemployment It is this context that the Draft Five-year Plan (1978–83) sought to accelerate the process of massive diversion of investment in favour of target groups and areas and emphasised the need for planning at micro-level to generate more employment This approach may be summed up as the developmental approach to the problems of agricultural labour. This is not a new approach in itself, for a perusal of earlier Plans would show that amelioration of the economic conditions of agricultural labour was built in into a number of programmes.

The First Plan adopted the stand that as prosperity in the rural areas increases, agricultural labour as a part of the rural community, would also benefit. Unemployment and underemployment would be mitigated by schemes included in the Plan for promoting agricultural production Industrial programmes, it was argued, would take away a part of surplus rural labour and the rural economy as a whole would start looking up through the community development programmes Special attention given to backward classes and Scheduled Tribes would largely benefit agricultural labourers. The first Plan emphasised on a programme for providing house-sites for landless persons, implementation of the minimum wages, formation of labour-cooperatives, resettlement of landless workers on reclaimed blocks of cultivable waste land, provision of financial assistance for house-building, purchase of bullocks, implements' and for special assistance by way of educational stipends and vocational training.

The Second Plan followed the same approach. Increase in agricultural production, expansion of economic opportunities, redistribution of land and the provision of social amenities for agricultural workers were considered as aspects of an integrated approach to the basic problem of poverty. Priority was given, in the National Extension Scheme, to organise programmes to assist the weaker sections. especially small farmers. landless tenants. agricultural labourers and artisans. Similarly, welfare measures covering backward classes was given emphasis The scheme for resettlement of landless workers was augmented during the Plan period The maximum possible utilisation of labour cooperatives was envisaged in the Plan

The Third Plan realised that the policy so far followed could touch only the fringes of the problem, and that the solution lay in intensive and rapid development of the rural areas and, therefore. enhanced the outlay for development of the rural economy. Emphasis was laid on village and small-scale industries, expansion of education by covering 6–11 year age-group, welfare measures for backward classes and village housing schemes To promote employment in rural areas. a programme of rural works was drawn up. It was hoped that under this programme additional wage employment in rural areas for about 100 days in an year, especially during the slack season, would be provided for about 2 5 million persons by the end of the Plan The electrification programme included in the Plan was expected to create considerable additional employment by promoting irrigation and industries in the rural areas

While the Fourth Plan followed the Third Plan approach, it expressed the view that adequate remedies for the present condition of agricultural labour lie, on the one hand. in fundamental changes in the agrarian structure, including cooperative farming. and resettlement programmes and, on the other hand, in industrial and economic growth and more specifically in the diffusion of industry in small towns and rural areas It was expected that the rural works programme incorporated in the Plan would provide work in slack seasons for about 1.5 million persons and this was expected to bring relief in a number of areas which were densely populated and where unemployment was high

Removal of poverty was the major objective of the Fifth Plan and the emphasis was on creation of additional employment opportunities particuarly for the weaker sections through special programmes. The most pressing problem, it was realised was expansion of employment and reduction of underemployment. A number of special programmes were launched during this period: these included—85 subsidised projects for cross-bred calf-rearing, 57 poultry production projects, 45 piggery production projects and 38 sheep production projects through SFDA and MFAL in 148 districts in the country. Integrated milk production-cum-marketing projects were planned for a number of states Fish farming development agencies were also planned

during the period To promote rural employment, substantial outlay was made in handloom, coir, carpet weaving and training for production planning programmes. Rural electrification was stepped up

The Draft Five-year Plan (1978-83) clearly stated that the major objectives for the next ten years would be *(i)* the removal of unemployment and significant underemployment, *(ii)* achievement of a rise in the standard of living of poorest sections of the population; and *(iii)* provision by the state of some of the basic needs of the people, like clean drinking water, adult literacy, elementary education, health, rural roads and rural housing.

These objectives, when realised, would result in higher employment in the rural areas Maximising employment in agriculture is one sure way of creating more income in the hands of agricultural labour Expansion of irrigation and regulation of adoption of technology to subssrve the interests of the agricultural labour were set out as ideals in the Plan. Strengthening of rural infrastructure through the revised Minimum Needs Programme would benefit agricultural labour in getting more employment and income during 1978-83 (see Annexure 2) Schemes like rural roads, rural water supply, rural electrification and rural housing under the revised Minimum Needs Programme would directly make an impact on the living conditions of the agricultural labour Emphasis on cottage and small-scale industries and on programmes for rural housing would benefit the weaker sections directly and indirectly. The Plan recognised the need to promote organisations among rural workers and to help in this process, it was proposed that such organisations should be involved directly in the implementation of *(a)* land reforms and distribution of surplus land, *(b)* programmes for developing ancillary services such as credit, supply of inputs and marketing, and *(c)* programmes concerning employment generation schemes, sueh as public works, agro-industries and rural crafts

This brief review of the approaches adopted by successive Plans makes it clear that the shift, though gradual, was definite and positive. The fact remains, however, that the such *ad hoc* and specific programmes may not provide sustained opportunities for income generation among the agricultural labourers Schemes like MFAL, SFDA were not effectively utilised by these sections probably due to certain limitations The need for a minimum land base to take advantage of most of the special programmes rules out the possibility of the benefit going to any significant number of agricultural labourers

It is not realised that even if employment is provided if no suitable wage policy is adopted the income generated would not push them up even to the poverty line. Hence the policy approach for the agricultural labour should contain not only employment programmes but also a wage policy which is linked to the rise in prices, as well, so that ultimately the poorest sections are lifted above the poverty line, To achieve the minimum level of

consumption through employment earnings, a standard earner has to be paid Rs 4 89 in rural areas and Rs 7 28 in the urban areas at the 1973–74 prices

An employment policy in the agricultural sector should be developed with a high unskilled labour component and with opportunity for continuous employment if the agricultural labour has to derive any benefit therefrom. While in most of the developmental programmes labour, particularly unskilled, gets employment during construction phase, continuous employment does not materialise To offset this, agricultural labour should be engaged in schemes that would generate income continuously One such scheme is to effect a radical and effective distribution of land and all the essential agricultural inputs, which alone would give the agricultural labour a sense of confidence and social and economic security Any effort sans this element would dry up in due course without achieving the objective of removing poverty from the poorest sections of the society.

ANNEXURE 1

Employment Programmes for Rural Workers Since 1968

1 Rural Works Programme

Years (1)	Expenditure incurred (Rs in lakhs) (2)	Employment generated (lakh man-days) (3)
1961-62	30 63	18 96
1962-63	112 05	57 15
1963-64	416 11	178 93
1964-65	530 75	222.42
1965-66	843.43	346.87
Total	1,932 97	824 33

Source: Report, 1966-67, Govt of India, Ministry of Food, Agri. C D & Coop., (Dept of C D), New Delhi, Pp. 41-42.

2 Rural Manpower Programme

Years/Period (1)	Expenditure incurred (Rs in lakhs) (2)	Employment generted (lakh man-days) (3)
Third Plan (1961-66)	1,932 97	824.33
1966-67	678.21	245.35
1967-68	551.09	198 53
1968-69	422 86	82 26
1969-70	201 90	41.05
1970-71	173.88	42 00

Source Reports of 1967-68 ; 1968-69 , 1969-70 & 1970-71: Govt of India, Ministry of Food, Agri , C D. & Coop (Dept of C D), New Delhi

3 Crash Scheme for Rural Employment

Year (1)	Expenditure incurred (Rs in crores) (2)	Employment generated (in crore man-days) (3)
1971-72	31 17	7 90
1972-73	53 34	13 44
1973-74	42.66	10 24
Total	127 17	31.58

Source Report, 1974-75, Govt of India, Ministry of Agriculture and Irrigation, (Dept of C D), New Delhi

4. Pilot Intensive Rural Employment Projects

Years (1)	Expenditure incurred (Rs in lakhs) (2)	Employment generated (lakh man-days) (3)
1972–73	118.31	33 70
1973–74	218.30	50.14
1974–75	621.63	97.76
Total	958 24	181 60

Source · Report, 1975–76, Govt of India, Ministry of Agri., & Irrigation, (Dept of R D.), New Delhi.

5. Programme for Weaker Sections

Programmes (1)	Period (2)	Total Expenditure since inception (Rs. in lakhs) (3)	Total Beneficiaries (in lakhs) (4)
1. S. F. D. A.	Upto 1977–78	15354 11	60 11
2. Food for Work programme*	1978–79	11 25 (lakh Matric tonnes of cereals)	1304 6 (lakhs man-days)

* Source . Annual Report, Dept. of Rural Development, Ministry of Agriculture and Irrigation

6. Area Programmes

Programmes (1)	Period (2)	Total Expenditure since their inception (Rs in lakhs) (3)	Total Employment generated since inception (lakh man-days) (4)
1. D P A. P.	From 1974–75 to 1977–78	28124 63	2833 34
Beneficiaries	From 1974–75 to 1977–78	—	(18 31 lakh persons)
2 Tribal Area Development Agency	1974–78	1409.64	N A.
Beneficiaries	Up to March, 1978	—	(3 35 lakh persons)

(1)	(2)	(3)	(4)
3. Hill Area Development Projects	1974–78	190 46	N A
4 Desert Development Programme	1977–78	610 (allocated)	N A.

Source Some Special Programmes of Rural Development, Statistics 1977–78, Govt. of India, Ministry of Agriculture & Irrigation, Dept. of Rural Development (Administrative Intelligence Division), New Delhi, 1979

ANNEXURE 2

Targets and Outlay for Revised Minmum Needs Programme During 1978-83

S No	Item	Coverage 1978-83	Outlay 1978-83 (Rs. in crores)
1	(a) Elementary Education	90%	900
	(b) Adult Education	66%	200
2.	Rural Health	PHC 46% Sub-centres 71%	
3.	Rural Water Supply *	100%	675
4.	Rural Roads*	100% coverage of villages with population of 1500 & above and 50% coverage of villages with population of 1000-1500	800
5	Rural Electrification*	40,000 villages to be electrified	250
6	(a) House-sites for* landless and rural housing		500
	(b) Environmental improvement of urban slums	13 million urban slum dwellers in large cities to benefit	190
7	Nutrition Programme	About 4 million addl. children under MDM, Addl. 2 6 million Pre-school and nursing mothers under SNP	175
		Total	4180

* These programmes generate more employment opportunities especially to the agricultural labourers as well as to the rural labour during 1978-83

Source Draft Five Year Plan 1978-83, Govt of India. Planning Commission, New Delhi, 1978, p 11.

Section II

APPROACHES TO RURAL DEVELOPMENT

DYNAMICS OF RURAL DEVELOPMENT

B C. Muthayya

Strategies to adopt for achieving the objectives of rural development should take into account human factors that affect the process of development. Development is conceived as dynamic because it implies change from one level of existence to another level which is always considered to be better The word 'change' produces emotional reactions as it might threaten the existing cultural patterns, practices or activities It is believed that changes are important but if they do not take one's past into account, they encounter resistance and are found to be disastrous. Change, therefore, should be an attempt to save something of the past rather than an attempt to obliterate it Eventhough 'change' might tamper with values, it has an advantage in that it fosters straight thinking and forces it to struggle direcrtly and consciously with the problems of value that are involved The expression change implies dynamism in the sense that it causes changes in other spheres of activity

People do not like to change themselves if the change is perceived to be imposed as it implies that it would tamper with their value system However, change is necessary in order to bring about improvements in the level of living of the people It is easier to bring about change in the physical and material aspects of a society than in social variables such as tastes and preferences, income distribution, norms about family size and a host of other values and attitudes

From the psychological point of view, change can be thought of in terms of alterations in the people's *awareness, perceptions, affects* and *attitudes* Changes can be brought about either by making the new level (innovation) attractive in terms of values, goals, incentives, etc or by an understanding of the existing level through which it may be possible to discover the avenues for change and use them as leverage points of change The former method may appear faster as has been amply demonstrated in various programmes like family planning, in introducing high-yielding varieties of seeds, etc , but the latter method, though difficult, is more conducive for sustenance of the change The change process affects an individual in three ways, *(i)* it changes his awareness, the way he perceives the physical and social environment including all his facts, concepts, beliefs and expectations, *(ii)* modfies his attractions and values, embraces both his attractions and aversions to groups and group standards, his feelings in regard to the status differences (either based on caste, class or achievement) and his reactions to sources of approval and disapproval (social norms or traditional/cultural practices); and *(iii)* affects his behaviour involving the degree of individual control over

physical and social movements. The three steps to be followed in case the desired changes are to be effected are *(i)* analysing the present situation through a study of facts, beliefs, perceptions, motivations and attitudes; *(ii)* determining the changes indicated by the analysis of the situation; and *(iii)* stabilising the consequent new situation in order to ensure the sustenance of the change. An attempt is made here to explain the theoretical base for any kind of change process from a psychological point of view so that the various processes involved can be understood in that perspective. Before we go into the discussion of the actual processes, it would be better to recapitulate the objectives of rural development and its implications for changes in the psychological dimensions of development.

Programmes of rural development are intended to bring about change in the existing level of living of the people in terms of improving their conditions in regard to food, clothing, shelter, health and nutrition, education, family size, communication, and so on However, before implementing such programmes, it is necessary to find out the existing conditions in order to discover avenues for innovations, factors of resistance and methods of bringing about improvements It has been found that the reactions of the people to the various programmes vary depending upon the socio-economic level to which they belonged at the given moment of time in terms of their present resources, activities and behaviours (socio-psychological) The resources can be house, land, irrigation facilities, modern agricultural implements, material possessions, cattle wealth, income, educational level and caste. As for activities, it may be conceived in terms of family size, health and nutritional standards, mass media contact, mobility rate, leisure-time activities and membership in social organisations The behaviours are to be assessed in terms of *awareness, perceptions, affects* and *attitudes*.

The rural development programmes have the following objectives *(i)* improving the living standards of the people, more particularly the weaker sections, *(ii)* encouraging participation of the people in the developmental process, *(iii)* making the process self-sustaining through the development of required skills and capabilities, and *(iv)* setting up people's institutions at different levels to ensure the effective use of existing resources for continued development of the area and the people

Since all the programmes of rural development are meant for the benefit of the target audiences with the aim of developing them, the type of changes in their psychological dimensions resulting from their exposure to these programmes are more important than physical and material changes This is particularly so as long as our aim is to make the people capable of sustaining the programmes which are implemented for their benefit In other words, the programmes implemented for rural development may provide the economic base but unless it is supported by a psychological base, the meaningful utility of the programme remains a matter of doubt. This possibly expl-

ains why, eventhough most of the programmes being implemented are good in content, strategy and coverage, the consequences of the programmes among the beneficiaries, based on information available through evaluation studies does not seem to convey the impression that they have made an impact on the various aspects indicated earlier A few aspects of the dynamics of development are discussed here

Awareness

Most of the changes can be seen in terms of gaining knowledge of the individual as a result of certain happenings in his social milieu For example, knowledge of modern inputs of agriculture, social legislations, social facilities, officials connected with development programmes, rural institutions—their role and responsibilities, rural credit agencies, and so on It is believed that unless one has knowledge of the kind of programmes being implemented, it will not make one to look for the programmes or to develop the required attitude in order to adopt them Therefore, gaining knowledge is one of the prerequisites for the subsequent processes of development In view of this, the information-giving process must be thorough in order to make the target audiences understand the nature and scope of the programmes that are implemented for their benefit. Knowledge of the programmes is generally disseminated either through the extension system in a developmental block or through mass media like radio, newspaper and recently, the TV.

A nation-wide study[13] was undertaken by the National Institute of Community (now Rural) Development in 1966 to assess the awareness of the people of various aspects of community development The main objective of the study was to find out to what extent this nation-wide programme has been understood and appreciated by the people, as such an awareness was considered essential for the process of development The results indicated that a large percentage of respondents (86) had knowledge of community development by some name or the other However, it was observed that the level of awareness was not uniform all over the country.

In one of the studies [9] it was found that radio and films were popular as the villagers were not only aware of them but they also listened to/viewed them to a greater extent However, these results did not reveal the extent to which these mass media have been useful in communicating information which is relevant to their occupations in particular, and welfare in general They may have been using them as a media of entertainment rather than as a media of seeking information It may be, therefore, necessary not only to publicise the fact that these media disseminate information relevant to their occupations and general welfare like weather reports, information on agricultural practices and inputs, family planning, nutrition, and so on, so that it might be possible for them to benefit from such information It may also be said that in view of the majority of the rural people being illiterate, it

may be necessary to organise discussion groups around each of the mass media so that those who are knowledgeable in the group can further augment the information disseminated through mass media Personal contact has been found to be more relevant in the Indian rural situation for disseminating information which is sensitive in nature like that concerning family planning It was reported[4] that officials connected with family planning, neighbours, friends and non-officials, in that order, have served as a major source of information regarding family planning A personal touch in communication seems to have a preference over the impersonal communication carried through the mass media Though the process of the former is slow, it is sure to make an impact and hence a certain workable combination of these two types of communication may be worth trying to create awareness among rural people It is also necessary to strengthen the extension system in order to make the extension agent available to any person who seeks information in regard to either his occupation or in the area of his welfare So, it is generally felt that the mass media could be effective to the extent of bringing about a general awareness of any particular programme rather than in changing attitudes and motivations of the people.

Perceptions

The way people perceive whatever that happens around them has an important bearing on their attitude to, and involvement in, the programmes concerned. Quite often it has been the experience that physical changes in terms of various physical facilities which were created are not perceived by the people for the simple reason that these facilities are not found to be meaningful to them or they are prevented from utilising the facilities by virtue of social constraints that are present in their life situation Therefore, whenever a programme is introduced, it must become part of the individual's perceptual world as he must get a feeling that this facility is going to help him in solving his problems and meeting his demands or augmenting his level of living As long as people do not perceive changes in their environment which are considered to be better, the chances of their developing an optimistic attitude are rather doubtful In one of the studies[3] undertaken, an attempt was made to study the perception of existing conditions in the village and development of the self and the village. Perceptions of changes in the village over a period of time is an indication of the extent of awareness and involvement in the process of change. It also provides the necessary stimulus for people to look forward to improvements in the village set-up, and enthuse them to contribute their share in terms of money or labour. Any improvements that are introduced should not only be meaningful to the people in terms of their utility but should also, to some extent, satisfy their felt demands in order to be perceived as such. In this particular study, people perceived the changes in the village in terms of the facilities which met with their felt-needs like drinking water, transport, electricity, etc and

they also expressed their satisfaction with the existing conditions in terms of the facilities available to them. On the whole, the improvements perceived in the village are those that are desired by them and contributed to their survival, agricultural production process and comfort In some studies, it was reported that the existing facilities like primary school, drinking water well or even road were not perceived by the villagers for the simple reason that either these were not accessible to them or it is of less use to them As a result, it is necessary to identify such of the facilities which meet with the needs of the people in order to bring about perceptual awareness and *vis-a-vis*, involvement of the people in the developmental process Similarly, questions were asked on how occupation is perceived in terms of bringing satisfaction or dissatisfaction Here a higher percentage (64) of respondents* indicated satisfaction with their occupation though the percentage mentioning dissatisfaction was also considerable (32) Similarly, respondents were asked about how their wives perceived their occupation Here again, though the percentage of the respondents indicating that their wives were satisfied about their occupation was higher (49), there were about 23 per cent who indicated that their wives perceived their occupation with dissatisfaction. It is necessary for a individual not only to be satisfied with his occupation but it should satisfy also those who share his life experience This would contribute to one's mental health, and efforts in the direction of enriching his occupational performance will be generated when the perception of occupation held by both husband and wife is congruous Occupational development through the adoption of innovation may then become a possibility

In another study[11], an attempt was made to examine the perceptions of villagers in regard to various superstitious practices and beliefs It was found that a higher percentage of the villagers believed in religious practices, omens making vows to God and maintained a fatalistic tlook in the perception of their occupation. However, their belief in the fortune teller, evil spirit and magic as the causative factors of diseases was less prevalent. These results suggest that the beliefs system of the villagers is strong in matters relating to God and religion and in other areas it is negligible Any innovation which directly and indirectly affects the religious sentiments of the villagers may not meet with acceptance without reservations One wonders whether the resistance to family planning measures is in any way grounded on those belief systems Therefore, there is a need for the change agent to understand the belief system of the villagers influencing their perception, before making any changes in areas which are sensitive to them

Affects

Affect constitutes the feelings and emotions in regard to any object, person or programme The affect of the person provides the base for moti-

* N=444

vation of the individual Quite often, we have problems of making the people interested in the programme and also accept the programme on their own People will accept the programme only if it is perceived to be meaningful to meet their immediate needs. The type of feelings associated and the motivations aroused, in regard to the programmes are very important in order to bring about involvement of the people in the programme concerned. Attempts have been made to bring about involvement of the people through incentives, rewards, etc. but it has been the experience that the moment the rewards or incentives are withdrawn, the chances of the programme being sustained are less Therefore, it is necessary to make the people understand the importance of the programme, perceive its relationship to their day to day life situation and try to make them decide in favour of accepting the programme on their own without a feeling of it being imposed from outside Hence, motivation is a very important dimension in any kind of programme implemented for the betterment of the people

Motivation refers to the process of arousing action, sustaining the activity in progress and regulating the pattern of activity. To motivate is to cause the release of energy in a desired direction

One of the objeetives of the community development movement was to raise the expectations of the rural masses which was considered necessary under the assumption that increased expectations would lead to putting in increased productive efforts. But the basic factor that expectations in a vacuum would not bring about increased effort but increase dissatisfaction seems to have not been taken into account One should have certain basic requirements to base one's future expectations as otherwise they will remain unrealistic A study[2] conducted in some villages in Lucknow district in 1966, revealed that the people were still clamouring for satisfaction of their basic needs like food, clothing, shelter, leave alone a piece of land to call as their own In this context, the expectations that were raised by the community development programmes could not be fulfilled as the people did not have the basic resources to alleviate their existing conditions, not to talk of fulfilling the expectations cherished Naturally, therefore, the yawning gap between expectations and attainment has led, to some extent, to disquiet in the rural areas. Another study[14] that was conducted in some villages in Allahabad also revealed that the range of needs expressed by the villagers, while highly restricted, were largely confined to items of immediate necessity and subsistence Yet another study[3] conducted in Andhra Pradesh also brought forth information suggesting that people, by and large, want to produce more to meet the immediate basic and family needs In a similar study[12] conducted in some of the villages of Uttar Pradesh, Haryana and Rajasthan, it was reported that ownership of land, irrigation facilities, crop insurance, guaranteed minimum price for the produce, social rewards, and other titles were powerful motivators to the farmers.

In a nation-wide survey conducted by the National Institute of Community (now Rural) Development in 1966 in all the 16 States of the Indian Union, a question was asked of the respondents as to the constraints they would accept if they were offered a job in which they could make a lot of money (economic motivation). It was found that a larger percentage of respondents indicated that they would stop from accepting the offer if it involved endangering their health, selling their land, disobeying their parents, changing their occupation, leaving their village and living in a big city, in that order. Thus, we find health, land and obedience to parents are the main factors that prevent them from accepting the offer. In another study[3] undertaken in East Godavari District of Andhra Pradesh a similar question was asked and the results revealed that the majority of the respondents would not take up a highly remunerative job outside the village if it involved keeping themselves away from their family and friends or disobeying the elders. This reveals that family bonds are more important than the bonds of village or the land. Therefore, the stress on family needs and taking the elders in the family into confidence in carrying through innovations may better facilitate change

In a small-scale study conducted in Andhra Pradesh[1], it was found that the farmer-cultivators maintained a progressive outlook aspiring for some increase in most of their personal assets but their aspirations were cautious in respect of items like material possessions, livestock, furniture, house, agricultural implements, landholding, etc which involved expenditure. Their aspirations were very realistic probably because of caution and/or a defence against failure as they did not want to aspire for something which they thought they might not achieve, judged from their present frame of reference

These few studies, in a way, suggest that the rural people studied, by and large, are restricted in their wants and they did not visualise the possibility of improving their present level of living These studies also revealed that farmers, by and large, are not motivated in spite of the expectations that were raised. Of all the variables in agriculture, the farmer is the most crucial and the least predictable Therefore, there is need to understand the nature and level of motivation of the farmers and also the incentives which would be meaningful to them in order to encourage their productive efforts. In the context, motivating the people is of paramount importance.

Motivating the villagers to participate in the community affairs or to improve their personal assets is a prerequisite for bringing about their involvement either in community efforts or in the personal productive effort. Therefore, for effective motivation, it is essential to know the *goal* that is to be achieved, the *energy* or effort that is to be released and the tool or method that is to be used to direct or control the energy. The programmes that are implemented for development in the community in terms of providing technical skills from external source or amenities for better living, may not

generate the local impulses to improve as it may give rise to a tendency to depend upon external source for such assistance In case the community development, as envisaged in its conceptual framework has to be achieved, it is necessary to understand the level of motivation of the people in terms of their present deprivations, prepotent need areas and then by using proper methods attempts should be made to motivate them through an emphasis on such of those deprived need areas. Any satisfied need would cease to be a motivator of behaviour and hence our effort should be to find out those needs which are deprived and use them as incentives for furthering the motivation of the people. So motivating people for rural development is of primary importance for any change or improvement that is envisaged

Attitudes

The concern shown in recent times regarding the study of attitudes and attitude change implies an urgent need for bringing about change in the behaviour of people in keeping with the progress in economic development and its consequent social changes Unfortunately, the changes in the attitude of the people lags behind the socio-economic changes that take place in their environment. It is rightly pointed out elsewhere that as our foot treads on the world of a new society, our heads continue to dwell in a world that is gone. A person's attitude define for him what he is, and what he is not, *i.e.*, what is included within and what is excluded from his self-image. These are momentary or transitory affairs for the individual. There is always a tendency for the attitudes to endure even when there is change around him. When a person holds a particular attitude towards an object, he is predisposed to act in a certain way towards that object.

When we think of rural development, it is necessary for us to examine the measurement of attitudes on the following four general issues[15].

Value. Value positions on issues about the quality of life at both the task and the social relation levels are rooted in culture, personality and unique circumstances. It is necessary to find out whether the members of a community feel that there should be a change for the better and if so, what should be the type of community in terms of material goals, quality of life and type of social relations they envisage and desire. This must serve as a guide-post for bringing about rural development

Capability. This suggests the range of the possible in terms of an understanding of the level of generality of functions achieved in the existing community structure, the dominant forces which affect the community structure and the opportunities that exist for its improvement.

Responsibility The question here is whether the locus of the initiative for rural development should be in the community or elsewhere. In case, the local initiative is lacking, outside intervention may be necessary. In such a situation, it is necessary to know the consequences of such intervention.

Hence, for rural development, it is necessary to encourage the local initiative as far as it could be managed but where it is lacking, attempt should be made to provide initiative through an external source to aid the process of local initiative.

Commitment It is the binding of an individual to an act with the psychological bases of participation and leadership in the community. It is necessary to identify and assess the various functions and levels of commitment required among the people concerned to bring about rural development Here it is necessary to identify the interplay of self-seeking and community service motives to achieve the community-oriented goal.

The attitudes among the villagers are generally measured on each of these four issues In other words, to what extent people have an idea about the quality of life they would like to have or the concept of their good life as the case may be It may be relevant to know the extent to which they are capable of handling their affairs in terms of skills, efficiency and confidence One may also be interested to know the responsibility that people can take in regard to the implementation of various developmental programmes and what role they can play in this process It is also necessary to find out the level of commitment of the people to the various developmental schemes implemented for their betterment. Therefore, attitude questions can cover any one of these four general areas consisting of different facets of each one of these issues. The results of a few studies on attitudes are given in order to indicate the factors which, by and large, govern rural attitudes. It has been found in a few studies that the socio-economic status, as assessed, based on the social and economic position of the individual concerned in the village community, to a great extent, determined their favourable or unfavourable attitudes It has also been found that women regardless of the socio-economic status seem to maintain an unfavourable attitude towards change as compared with men. The following results of certain studies on attitudes are quoted to serve as an illustration

Studies on Attitudes

(a) Agriculture Based on the analysis of the results[6] regarding the attitude of rural households towards certain aspects of agriculture (selling land, capacity to do work, leasing-in land, mutual help among farmers, satisfaction with output of hired labourers, necessity for union for farm owners, indifference of landowners to the problems of labourers, wages paid to hired labourers, reasonability of market price, attitude towards multi-purpose coöperative society regarding its helpfulness to farmers, getting loans, and abolition of cooperative credit societies, attitude towards farmer's programme over the radio and taking loans from moneylenders), it was concluded that males (in the age-group 27 to 30 years), had a more favourable attitudes towards agriculture than females (in the age-group 20 to

25 years), persons in the high socio-economic status group, those with higher income, higher value of assets, those having more than 5 acres of land and cultivation as their occupation and who belonged to a high caste group, had a more favourable attitude towards certain aspects of agriculture than those who belonged to lesser levels in each of these variables. The trend of the results between male and female respondents was similar in all the socio-economic variables except in the case of socio-economic status and occupation In the former, the attitudes of middle and low socio-economic status groups among the females did not differ significantly In the latter, the attitudes of females whose husbands' occupation comes under the category of "professions" had a more favourable attitude. Between the males and females, in all the variables studied. it was consistently found that males maintained a more favourable attitude than the females to certain aspects of agriculture. Therefore, any innovation in the field of agriculture should not only take into account the attitudes of males but also of the females in the household so that it would be possible to orient the information on new agricultural practices and methods to both males and females as that would create the necessary attitude and help the process of agricultural development.

(b) Education. Provision for education of children is one of the primary goals in any endeavour connected with the development of a nation. With this object in view, the country has endeavoured to provide for at least a primary school in every village. It was thought that this provision would make the villagers utilise this facility to the maximum extent and see that their children are better placed than themselves as far as education is concerned

It is likely that traditional beliefs and practices hamper their orientation to maintain any aspiration for children's education It was found in a larger study[3] that lack of parental orientation to education was one of the causes mentioned for being illiterate. It may also be true that the need for education and its value for one's living in a society which is in transition must be felt before one thinks of a reorientation of one's attitude to education of children

In an earlier study[1], it was found that a higher percentage of farmers aspired for high school education for their sons but with regard to daughters, the aspiration was limited to primary and middle school levels. It has also been found that one's level of formal education need not necessarily determine one's aspiration for education of sons These results suggest that the attitude of the people is important either to maintain a higher level of aspiration for education of children or to develop a need for education An attempt was made to analyse the answers of villagers (males and females) to a few questions relating to education of children in general and girls in particular. The results, based on a higher percentage of response, revealed that.

1. Children should be sent to school even before they are five years old. Males supported this view to a greater extent than females. 2. Giving education to children is possible only to people with more money. Females contributed to this view to a greater extent than males 3 Giving education to girls is not a wasteful expenditure Males supported this view to a greater extent than females. 4 Girls should not be given as much education as boys A higher percentage of females contributed to this view than males. 5. Girls should not be sent to school after puberty as it will reduce the chances of their marriage. A higher percentage of males contributed to this attitude than females. 6 Matured girls should not be sent to school as it is against the traditional practice This is expressed by a higher percentage of females than males

(c) Attitude towards Health Facilities and Practices.[4] The majority of the respondents (out of a total of 684) did not believe in household remedies for ailments like diarrhoea among children below one year and it was not associated with cutting of teeth but believed that injection is the only remedy for any ailment Chickenpox and smallpox are caused due to the wrath of goddesses. contagious diseases can be prevented by inoculation and vaccination. the best cure for jaundice is in getting some *'manthram'* performed, and that pregnant women should drink toddy as it is good for their health With regard to medical facilities, the majority of the respondents preferred private doctors to government doctors as they felt that they did not receive sufficient attention in the Primary Health Centre, and preferred a known though untrained dai to attend to maternity cases.

(d) Attitude towards Child-rearing Practices The analysis of the results[5] regarding the attitude of the rural parent's towards child-rearing has revealed that males in the higher socio-economic status group. those with higher income and with acquired occupations like Government service, business and trade, professions and those who belonged to the higher castes and muslims, christians maintained a more favourable attitude towards childrearing than those who belonged to lesser levels in each of these measured variables As for the value of assets, males having assets valued at Rs 1,000 and also those with assets valued at Rs. 10,000 and above. had a more favourable attitude than those in the other levels. However, females with assets valued at Rs 10,000 and above had a more favourable attitude than those at the other levels.

With regard to age, among males, the higher age-group (31 years and above) had a more favourable attitude than those in lower age-group (30 years and below).

In the general comparison between males and females and also in all other comparisons in each of the variables, it was found consistently that males maintained a more favourable attitude than the females However, the mean differences were not significant in certain categories or levels in each

of the variables studied This result is indicative of a less favourable attitude among the females towards better child-rearing practices, regardless of the nature of the socio-economic conditions that prevailed in their home environment. It is likely that the traditional values which are very much in the nature of the Indian women fosters an attitude which is in keeping with the traditional structures regarding the upbringing of children.

These few studies on attitudes suggest their importance in analysing the present predispositions of the people before orienting them towards any innovations in areas where programmes for their development are envisaged

A study[10] was undertaken to find out the effect of the economic betterment resulting from the adoption of a package of agricultural practices oriented to agricultural development, on their attitudes in some of the socio-psychological dimensions. For this purpose, ownership of land was used as the basis for classification of the respondents. They were drawn from different land-size categories and also from agricultural labourers from two states, and two districts in each state, one Intensive Agriculture District Programme (IADP) and another non-IADP. The land-size classification adopted was: agriculture labourers, those owning 0-5 acres, 5 to 10 acres, and '10 and above' acres

The respondents with higher land-size categories, (either 5+ acres or 10+ acres in both types of districts had higher sores than those in the lower land-size (5 acres and below) categories indicating the prevalence of the attitudes in the following socio-psychological dimensions to a greater extent: personal participation, civic sensitivity, sense of citizen's duty, autocratic attitude, presence of family and social conflict, leisure-time activities, higher aspirations, cooperative farming, satisfaction with the social facilities, higher saving, mass media contact and mobility rate. However, lower land-size category (below five acres) and landless-agricultural laboures had higher scores indicating their attitudes in political participation, political efficacy, fatalism and caste orientation The results of this study revealed to some extent the importance of size of landholding on one's attitudes

Therefore, in any rural development programme, attempt must be made to understand these dynamic processes influencing the acceptance (or rejection, or favourable or unfavourable attitudes to any programme by the people.

An understanding of these processes through properly organised studies among the target groups will facilitate not only in programme implementation but also help in identifying factors of resistence, avenues for innovationa and | methods of bringing about improvements One perhaps can also say that neglect of these human factors or attempts to take them for granted under the rigid forces of economic programmes oriented to provide the economic base, may result in situations where the people may become less responsive, incapable and put in less efforts to sustain the programme, thereby failing to bring about improvements as envisaged in the objectives of the programme.

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PANCHAYATI RAJ

Shiviah

The Case for Panchayati Raj A Fresh Look

Though Panchayati Raj is usually described as a system of rural local self-government, there is a good deal in it that transcends the conventionat framework A basic difference is due to the fact that the context of developmenl administration has entailed a qualitative change in the theory and practice of rural local self-government This qualitative change acquires greater significance when one views it in the emerging perspective of 'multi-layer' democracy.

The case for 'local self-government' (urban and rural) in the convential sense of the term is well known, but even that bears recapitulation, as resistance on the part of some to Panchayati Raj might well stem from their resistance to 'local self-government' itself. Local self-government, in the sense of a complex of statutory bodies with a component of elected representatives, and invested with certain powers of taxation, is a relatively recent phenomenon—barely two centuries old in most countries of the world But local *institutions*, looking after aspects of local affairs, have existed since hoary antiquity, embedded, as it were, in the tribal matrix Custom, after all, has governed mankind for a much longer period than positive law. Before the process of formalisation began, the basic sanction behind the local *institutions* had been custom. Rural local institutions have been an important aspect of the socio-economic and political structure: administrative requirements in relatively bigger political units add another dimension Considering the place of custom in the total legal system, legal fictions concerning the discretion of the sovereign power cannot be taken literally. In England, the proposition that 'municipal liberties' are as much a part of the common law as individual liberties, indicates the sturdy base of local government in general.

Notwithstanding the pretensions of the positive law, this base became sturdier still under the democratic dispensation, local government got transformed into local self-government Like several other institutions informed by democratic theory, local self-government too acquired a multi-dimentional character. The period during which this took place, spanning the evolution of the modern industrial civilisation, witnessed considerable expansion in the activities of local self-government To the traditional functions—watch and ward, charities, repairs to roads, bridges and churches—were added 'civic' functions—protected water supply, drainage, street cleaning and lighting, regulation of markets and traffic, and sanitation and health in general Later, local public works and educational facilities joined the array Epitomising,

as democracy did, the thrust of vast changes in modern times, it would be incorrect to view the array of functions mentioned above in terms of some simple (quantitative) incrementalism Democracy has had, *vis-a-vis* local self-government, a qualitative dimension Both the quantitative expansion and the qualitative dimension were bound up with the fact that democracy (as an operative reality) put the *citizen* at the centre of things, the *subject* receded into the background rather rapidly. Watch and ward would be necessary, and charity might continue to have a role However, the dignity of citizenship, and the needs of the citizen, imparted to them (the traditional custom) certain quaintness. The scope of the needs of the citizen was much larger, comprehending health and educational facilities, and some services germane to the modern civilisation Along with this wider scope went a keener attention to the interests and susceptibilities of the citizen. This was the new idiom of 'civic amenities' Democrats of a relatively wider vision went beyond this, and visualised local self-government as an instrument of political education and a nursery of representative government. The argument that democracy was relevant at higher levels where the exercise of plenary legislative and executive powers was involved, became weak, and eventually broke down in the face of the following pragmatic considerations. Besides its 'nursery' role, local self-government serves as a useful feedback mechanism. Citizens in general are more keenly interested in the quality of services in the proximate environment and they tend to judge the government as a whole by this test. Such a feedback mechanism is self-corrective in some respects By helping reduce the scope of abuse of power and costly mistakes incidental to excessive centralisation, local self-government makes a significant contribution to increasing the overall efficiency of the political system. These wider objectives might well come into conflict, at times, with specific aspects of administrative efficiency at the relevant levels of local self-government. When they do, it is worthwhile examining if the wider objectives should not have greater weight and higher priority Conceding that socio-political processes operative at this level tend to be quite untidy and create problems for even well motivated administrators, one might still contend if this does not amount to being over apologetic about the contribution of local self-government to administrative efficiency as well. Responses to this poser can be articulated in general and specific terms. In the ultimate analysis, after all, questions of administrative efficiency cannot be separated from the question of the efficiency of the political system as a whole More specifically, the participatory input through representational mechanism is helpful to administrators in appreciating the environmental uniqueness of localities, and their problems, needs and perceptions. Popular surveillance and involvement could provide correctives to deficiencies in bureaucratic performance This is no mean contribution in situations where bureaucracy (at lower levels) is still largely 'traditional', having a poor orientation to the needs and grievances of the people. Elected functionaries may be no better (This is not the

place to reflect on the contrarities of human nature!), but much has to be left to the self-corrective mechanism of democracy. Above all, a well designed structure could help minimise several difficulties in the field of local self-government

All this—the conventional framework—is germane to Panchayati Raj. But as noted at the outset, Panchayati Raj transcends this framework, what accounts for a qualitative change in this respect is the context of development administration Since the end of II World War, development administration has acquired the character of a global movement While the focus, of course, has to be on the developing world, it is well worth remembering the universalistic context of the combined historical thrust of the liberal and socialist ideologies, without ignoring the perceptions in either 'camp' about the extent of mutual compatibility To be more specific, development (here rural development) has two components quantitative and qualitative. The quantitative component refers to economic growth. The qualitative component involves the value dimension and is, therefore, more complex. It brings into the picture the combined historical thrust of the ideologies mentioned above. For convenience, we call it 'the participatory thrust'. The case for Panchayati Raj has to be viewed in this perspective

The contribution of Panchayati Raj to rural development could be visualised in short-term, middle-term and long-term perspectives Barring the long-term perspective, the analysis below will be informed by a relatively sharp focus on 'developmental instrumentalism' and considerations relating to economic growth

1 Economic growth vitally depends upon performance levels of organisations involved in development The magnitude of the task of rural development is well known poverty, unemployment, low productivity, consumption and literacy levels, etc. demand urgent and effective action. They, in a way, indicate the vastness of the scope for increasing economic and political-administrative capabilities Drucker's insightful statement—'There are no underdeveloped countries, there are only undermanaged ones'—brings into bolder relief the vital importance of the managerial dimension Considering the magnitude of the task of rural development, we can say that the situation in India—demands organisational and educational efforts on the widest possible scale, geared to location-specific planning and intensive (but ecologically sensible) utilisation of local resources. A more efficient implementation of the development programmes is, of course, integral to the whole perspective

Let us figure out the contribution of Panchayati Raj in this regard. Firstly, the very existence of Panchayati Raj institutions fills a vast organisational gap. Through a process known as intermediate aggregation, the Panchayati Raj leadership plays an educative role *vis-a-vis* the general direc-

tion of development Secondly, local planning, particularly of the type alive to ecological factors, will gain through participatory processes A locality has a 'design of life', of which the warp and woof are the natural resource endowment and human beings making use of it This design requires sensitive handling However, the approach of administrative and technical functionaries often leaves a gap between imputed and actual needs Panchayati Raj helps bridge this gap to a considerable extent, indeed to a great extent, if the functional dimension (as opposed to simplistic doctrinaire positions) is better appreciated both by officials and non-officials Thirdly, the involvement of Panchayati Raj Institutions contributes to the improvement of 'programme implementation', not exactly in terms of one-to-one correspondence but in rather complex ways The findings of a Cornell University Study (by Norman Uphoff and Milton Esman), covering sixteen developing countries, indicate a relatively direct contribution of rural organisations (including those like Panchayati Raj Institutions) to the 'effectiveness of planning and the efficiency with which available resources can be utilised', to the mobilisation of resources: to the provision of inputs and services, to the integration of these inputs and their timely supply by communicating requirements and voicing complaints, to the strengthening of administrative accountability, and to the articulation and processing of demands of rural people in general, and the intended beneficiaries in particular, so that 'the goals, priorities and operations of rural development programmes can be responsive to or at least take account of their requirements'

The context of development administration differs from country to country, and generalisations of this nature have to be taken with a grain of salt Among the problems of implementation, not the least one is that relating to 'empathic gap'. Power structure in rural areas is loaded against the poorer and ritually 'low' castes Status orientations tend to be relatively strong in developing countries In the Indian context, they are accentuated by ritual distance, thus further complicating the problem of empathic gap Despite the feeling—apparently well founded in fact—that Panchayati Raj leadership may be no better, the communication channels opened up by democratic processes will help bridge the empathic gap to a considerable extent, and transform both officials and non-officials in the direction of greater responsiveness The importance of such transformation as a factor in improving performance levels of the apparatus of development administration needs adequate attention.

2. The contribution of Panchayati Raj Institution in the short-term perspective touched upon in the foregoing paragraphs cannot be viewed in isolation of those in the middle-term perspective The problem of empathic gap, for example, is related to the wider process of modernisation relevant to the middle-term perspective.

We shall again focus attention on economic growth It is now increasingly appreciated that economic growth depend upon a complex of 'non-economic' factors—cultural, social and political—which condition patterns of consumption, production and distribution. A positive orientation towards the secular world and the will to improve one's life, higher achievement orientation and aspirational levels; receptivity to science and technology, and a disposition to use resources rationally and raise productivity levels; and a widely shared empathy for social mobility and participatory urges, entailing weakening and eventual obsolescence of ascriptive ethos and the social structure characterised by it, and so on, together constitute the base on which economic growth is posited. The expression 'modernisation' sums-up the broad historical thrust underlying the socio-economic and political transformation touched upon above Economic growth, in other words (certain circularity notwithstanding), depends upon a complex of multi-faceted changes involved in the process of modernisation

A careful examination of the experience of developing countries in our times reveals that politicisation occupies a high salience in this process. It has been aptly described as the driving force behind modernisation. Politicisation ("Inducting people into political processes") itself being part of a longer story of western impact—of technology and political movements and institutions—, it would be wrong to regard it as a discrete entity, determining everything else. It derives its unique significance from the fact that since the end of World War II, it has been an era of the positive state: the Welfare State, a shade milder than the Socialist State, has consciously assumed vast socio-economic responsibilities. For some decades past, the State has been. practically throughout the world, the prime mover of socio-economic change Allowing for a pardonable degree of dramatisation, it should be possible to oppreciate frequent assertions that in our times social, economic and administrative questions have political answers

Unless we deify the State, things like political will and political performance would depend, in the context of democratic politics and in the ultimate analysis, upon the breadth and intensity of politicisation. By broadening and intensifying politicisation in rural areas, Panchayati Raj Institutions have a significant contribution to make to rural and national developement. The proximity and frequency of the election processes, right in the heart of tradition as it were, highlights the contrast between the democratic basis of legitimacy and the traditional ascriptive basis. One should not be surprised if, in the beginning, the traditional power structure gets fortified through the new election processes; but the contrast referred to above is bound to induce psychic mobility and generate pressures eventually leading to real mobility. In so far as this entails weakening of the ascriptive ethos and loosening of the traditional structures, it will be an indirect contribution to economic development. The thrust of participatory processes is,

in fact, deeper It is easy to dismiss 'voting' as a 'formal' right for the socio-economically weaker sections. Even if this 'right' is exercised under duress, and is overtly formal. it would have set in motion a subtler process of assimilation of the values of political equality (expanding into other forms of equality), brotherhood and partnership in ways functionally relevant to an evolving democratic order. This. indeed, is the deeper dimension of participation, enabling the downtrodden to acquire a new sense of dignity. it is particularly relevant in a country like India where the caste system has entailed greater violence to the values of human dignity and brotherhood. Democracy, thus, is more necessary to developing countries where the problems of social change tend to be more complex. It is not at all contended that there are no quicker or more efficacious alternatives. But perhaps they too would presuppose a critical degree of politicisation

Concerned as we are here with rural development, the nexus between democracy and development will be of more direct interest. for the simple reason that the tasks of democracy are more meaningful where tradition is stronger We have already had intimations of the symbolic relationship between democracy and development If one were to maintain that democracy facilitates economic growth up to a degree. and thereafter it will, or might become dysfunctional, an answer in terms of the value dimension of 'development' would not be difficult. Economic growth is important, vitally important, but if it is to be related to the values of human dignity. freedom, equality and justice, the relative mix of priorities should give precedence to the value dimension of development. to the 'quality of life'. In this perspective. economic growth is, as it were, the middle term. the first and the last being democracy; democracy is both the means and end of economic growth Considering the shift of emphasis from growth *with* social justice to growth *for* social justice, and a renewed emphasis on 'quality of life' in the context of energy and ecological crises, the position outlined above is likely to acquire greater relevance So will an institutional complex like Panchayati Raj, as a vehicle of democracy and development

3. In the foregoing analysis, we have taken, for the most part, an instrumental view of Panchayati Raj Social science research oriented to the needs of development planning and implementation of developmental programmes could possibly admit of no other view! Even so, a fresh whiff of political philosophy might be invigorating!! Avowedly pragmatic in tone, the Balwantray Mehta Report indicated that Panchayati Raj was a response to the perceived gaps in the wake of the community development experiment A vigorous 'democratic structure' was demanded. as it were. by the community development programme. The Report could better be viewed as the culmination of a trend. conditioned by the Gandhian perspective on decentralisation, rather something novel emanating from a purely pragmatic (if one could talk of such a thing at all) approach. Even before the C. D. pro-

gramme started off the ground the First Plan enunciated categorically that "so long as local self-governing institutions are not conceived as parts of the same *organic constitutional and administrative framework, the structure of democratic government will remain incomplete*". Here the conventional local self-government approach looks very prosaic It (the enunciation) also transcends (quite different from 'rejects') developmental instrumentalism, and touches a basic issue: the nature of the polity. The Second Plan echoed this, and was, in some respects, more explicit in referring to the 'needs of democratic planning'; it visualised 'a well organised democratic structure' in the district, so much so that the functions of the popular body at the district or sub-divisional level body were to 'include the *entire general administration and development of the area,* other than such functions as law and order, administration of justice, and certain functions pertaining to the revenue administration'. Conceding supremacy to the official enunciations relating to the nature of the polity and constitutional structure, one could argue that democracy at levels below the Centre and the States must be viewed as an end itself, a policy imperative, in other words, even if we reach a point beyond which developmental instrumentalism ceases to be operationally relevant. Would that be an avoidable or calculated risk one has to put up with because 'abstract' political theory has had its way? There are some contemporary thinkers (who seem to vindicate the value of Gandhian insight in unexpected ways and contexts) who suggest that it is far from being so. Alvin Toffler, for example, warns us of the dangers of technocratic myopia, based on elitist premises, and pleads for *'anticipatory democracy'*. "In complex differentiated societies vast amounts of information must flow at ever faster speeds between the formal organisations and sub-cultures that make up the whole and between the layers and sub-cultures within these". The feedback from layers represented by Panchayati Raj Institutions is bound to be valuable in this perspective.

Clubbing these three perspectives into an operationally clear set of criteria for reviewing the working of Panchayati Raj is not an easy task In the following section, an attempt will be made to keep their broad thrust in view.

Two Decades of Panchayati Raj : A Retrospect

The introduction of Panchayati Raj nearly two decades ago, in the wake of the Balwantray Mehta Report on the subject, was a landmark in the evolution of developmental administration in India. Panchayati Raj, in a sense, represented the logical working out of certain assumptions inherent in the C D and N. E S Programme, visualised by some leading spokesmen of Government and the Planning Commission as a 'movement'. The programme represented a comprehensive and coordinated approach to rural development, embracing all important facets of rural life: socio-economic,

administrative, political, and cultural A strong emphasis on rapid economic development was there, but it was informed by the conviction that a basic transformation in outlook and socio-economic institutions, in tune with the values enshrined in the Constitution, was necessary for realising this vital objective It was clearly appreciated that community development was, in relation to the people, 'both an educational and organisational process', and that its effectiveness depended upon the emergence and training of a new type of local leadership

We are familiar with the main findings and approach of the Report The Study Team was keenly conscious of the possibility of doubts and reservations about the success of Panchayati Raj on the part of State Governments It observed such doubts 'may, at best, justify a phasing of the process of creation of the panchayat samitis'. (para 2 46) The Samiti, it may be recalled, was to be the basic unit of divolution

Most States, in fact, did not share such reservations Let us have a glance at the actual situation Of the 22 States, Meghalaya and Nagaland have a different system of local government in the sense that they have area, range and tribal councils Despite important differences, the position in three other States in the north-eastern region—Manipur, Sikkim and Tripura—is broadly similar in some respects None of these States have Panchayati Raj The remaining 17 States are relatively big in size, and have had a more modern system of administration for long Of them only Kerala and Jammu & Kashmir have not introduced Panchayati Raj in the sense that they have only Gram Panchayats, without any higher tier or tiers The remaining 15 States which have Panchayati Raj, are as follows Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra. Orissa Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh and West Bengal.

Far from showing any reservation, or excessive caution, Rajasthan and Andhra Pradesh—which were the first to introduce Panchayati Raj—actually showed greater boldness than the Mehta Study Team While the *Report* envisaged a district body without any executive functions, they invested the Zilla Parishad with some Though a little late, Gujarat and Maharashtra were bolder still Maharashtra made the Zilla Parishad a very powerful body, in fact the most powerful Zilla Parishad in the country Such a set-up was visualised, but not preferred, by the Study Team The Rajasthan-Andhra Pradesh and Maharashtra-Gujarat patterns have had considerable impact on 9 of the remaining 11 States They might not have shown comparable initiative, but with reference to the cautious note struck by the *Report* their response should be considered as very positive (For details regarding patterns, etc vide tables in annexures We may note here that Assam, with its second tier at the sub-division (Mohkuma) level, and West Bengal, with four tiers—Gram Panchayat, Anchal Panchayat, Anchalik Parishad and Zilla

Parishad, do not conform to either pattern mentioned above They may be regarded as constituting a separate category. Tamil Nadu and Karnataka, with a district body having only advisory powers, form another category).

One might notice certain unevenness in the pattern of response. It is inevitable in a country of our size and diversity. Students of political and administrative institutions should, however, be prepared for greater unevenness when it comes to their working and performance However, even a sympathetic observer would be struck by the contrast between a promising start and subsequent vicissitudes The most disconcerting aspect of the whole situation has been the postponement of elections by long periods—in few cases by as many as 14 years Frequent supersessions is part of the story. In some States, the third tier, *i e*, the Zilla Parishad, was suspended or abolished, or provisions relating to it were kept in abeyance Since the middle of sixties, a general slackening of interest in community development had a corresponding adverse effect on Panchayati Raj

This brief descriptive analysis does not, of course, do justice to the complexity of the structural and operational aspects of Panchayati Raj, its vicissitudes during the last two decades, and perceptions having an important bearing on the evaluation of its performance. Structures impinge upon performance, so do vicissitudes (*e g*, external and internal 'emergencies', entailing relegation of things like Panchayati Raj to the background) Leaving such factors aside for the time being, we may see if, over the last two decades or so, Panchayati Raj Institutions have made any contribution to 'development' We take the grosser view first. Gram Panchayats have done quite well in states like Kerala (Legislation with regard to the 'district councils' has been enacted only recently, after a prolonged stalemate). In other states, their less satisfactory performance on the average conceals better performance in some regions In Maharashtra and Gujarat, the Panchayati Raj system as a whole has done much better. For about the first five years of their existence, Rajasthan showed encouraging results, and justified its reputation as a pioneer. Both in Tamil Nadu and Andhra Pradesh, the performance of the second tier (Panchayat Union Council and Panchayat Samiti) has been reviewed in favourable terms In Andhra Pradesh, the Zilla Parishad (endowed with some executive functions, but not as powerful as that in Maharashtra and Gujarat) has shown considerable vitality in providing initiative and leadership The developmental performance of some Zilla Parishads can be considered creditable. In West Bengal, the Anchal Panchayats, being successors of Union Boards, had a good base to build upon: ministerial instability and concomitant problems notwithstanding, developmental momentum was maintained in wide tracts of rural West Bengal. Assam is another state where the bigger panchayats remind one of their counter parts in Kerala. Its unique Mohkuma Parishad (sub-divisional body) has apparently been regarded well. Karnataka has not shown any marked

enthusiasm for Panchayati Raj, but its Taluka Development Boards have been picking up developmental momentum. The initial spurt of enthusiasm witnessed in U. P., Bihar, Madhya Pradesh, Punjab, etc. invite comparison with Rajasthan And so on

The gross view taken here gets assimilated into the short-term perspective referred to in the previous section Though it is true that since the middle of sixties till about 1978, Panchayati Raj in a majority of states has had severe set-backs, any round assertion about its 'failure' in the country as a whole would not be correct in view of the broad factual position outlined above. If one were to take into account the middle-term and long-term perspectives discussed in the previous section, 'failure' of Panchayati Raj would have a far more restricted meaning than the critics would like to convey. All the same, we may set this consideration aside for a while, and have a glance at the content, and tenor of the criticisms. The most persistent criticism relates to the dominance of dominant caste groups, who have used Panchayati Raj Institutions to strengthen their socio-economic and political hold further, and prevented the benefits of development from reaching the weaker sections (Their 'gatekeeper' role [1]). This concern is expressed by a wide spectrum of leftist intellectuals, politically active persons belonging to or speaking for weaker sections, legislators, administrators, etc. It is not unlikely that opposition to Panchayati Raj stems from considerations other than this concern. Thus, legislators in a number of states, perceiving in the Panchayati Raj leadership a threat to their influence in their constituencies, might seek to rationalise their opposition in terms of arguments politically more effective. A section of administrators could also have a similar perception. Annoyance with 'interference' in day-to-day administration, intrusion of party and factional 'politics', and the hardy perennials of corruption 'favouritism', 'nepotism', 'casteism' and 'communalism' (contexts and perceptions, of course, vary from region to region), tends to sharpen the case against Panchayati Raj in that perspective. Both as a legislator and as a member of the political executive conditioned by administrative perspective, an average minister could hardly be expected to show exceptional farsight and vision So, the resultant of these parallelogram of forces is a 'deficient' political will. Decentralisation by mistrust, postponement of elections by long periods (as long as 14 years in a few cases), and frequent, supersessions, dissolutions, etc. are some of the conspicious manifestations. No wonder, in a majority of cases where political will was palpably deficient, Panchayati Raj has been in a 'moribund' state.

A logically elegant and simple explanation of a phenomenon empirically so complex—involving general interests, forces and perceptions—is not possible, let alone a similarly elegant and simple solution. This would be quite clear from the analysis attempted in section 1. The analysis also suggests that a defeatist attitude is not at all warranted With a view to

over-coming the difficulties, we could indentify two broad configurations of problems those relating to the general social milieu, and those relating to designing a better structure of Panchayati Raj. Corruption, favouritism, parochial loyalties, etc are widespread, and it would be unfair to single out non-officials manning Panchayati Raj bodies for special condemnation. General factors like social milieu, situational compulsions arising out of scarcity, maladjustment with a fast changing environment, the extent of cultural backwardness, and so on, affect officials, political leadership at other levels, and persons belonging to different walks of life as much as they do non-officials associated with Panchayati Raj. The process of modernisation, with politicisation as its driving force, offers, so to say, a macro answer. Tensions, vicissitudes, contradictory pulls and pressures cannot be wished away. Considering however, the role of Panchayati Raj in the whole process, we can confidently take the view that a well designed structure of Panchayati Raj could help remedy several deficiencies, including the grievances relating to the weaker sections It must be remembered that in the long-term perspective, democracy is a more effective guarantee of the interests of the weaker sections, for it alone, through its 'churning process', inculcates in them a sense of socio-political efficacy without which both policy and implementation lack and inner dynamic. One of the important structural changes, therefore, would be that the democratic process should be allowed larger scope than it has where higher bodies like the Samiti and the Zilla Parishad have a large *ex-officio* component. The *ex-officio* system has been observed to fortify oligarchic tendencies, the modernising potential of the Panchayati Raj leadership thus gets correspondingly reduced Without altogether eliminating the *ex-officio* component (and completely snapping the 'organic' link), it should be possible to provide for the direct election of members, and give them a commanding position. 'Intermediate aggregation' as well as the logic of numbers, transforming both the stronger and weaker sections in the direction of a participatory society, would make Panchayati Raj better attuned to the needs of development In the short-term perspective, some reassuring safeguards, like 'reservations', constitution of social justice committees (as in Gujarat), ensuring that funds earmarked for their amelioration are properly spent may be good enough And so on Suitable legal and administrative measures could be devised to ensure that elections are held regularly, and that suspensions and supersessions are resorted to rarely.

Such procedural safeguards would be necessary, but they could hardly be considered sufficient. When it is a question of substance, much depends upon the effectiveness of planning and implementation of developmental programmes Apart from this, part of the structural inadequacy stems from certain imbalance in the relationship between officials and non-officials To cut the whole story short, we may note that in the all-India perspective, a broad trend is clearly discernible *(i)* Strengthening the district tier, so that

the technical and administrative competence available at this level could be effectively utilised, (ii) Separation of developmental functions from the Collector, and putting them under the administrative charge of an officer of comparable status and seniority, who would function as the Chief Executive Officer of the Zilla Parishad.

Maharashtra and Gujarat have played a pioneering role in this regard. Since 1964, a number of high power committees have come out strongly in favour of this pattern.

One could go on discussing administrative and other details. But the crux of the whole matter lies in 'genuine' decentralisation of powers and financial resources. Panchayati Raj institutions have done better as in Maharashtra and Gujarat, where there has been a genuine transfer of powers and resources

Bringing about these structural changes is not going to be an easy proposition, as it involves the question of 'political will'

The Future

The change in political complexion in the wake of the general elections in 1977, held the promise of a new thrust on the rural development front, and a stronger commitment to decentralisation. This became evident when a high power committee on Panchayati Raj Institutions, headed by Shri Asoka Mehta, was constituted at the end of 1977. The Resolution appointing the Committee sounded very reassuring indeed "The Government accords the highest priority to rural development, so as to increase agricultural production, create employment, eradicate poverty and bring about an all round improvement in the rural economy. The Government considers that the maximum degree of decentralisation, both in planning and in implementation, is necessary for the attainment of these objectives". The Committee was asked to suggest measures 'to strengthen' Panchayati Raj Institutions, 'so as to enable a decentralised system of planning and development to be effective' Its members included three Chief Ministers and an ex-Chief Minister, two ex-Ministers of State in the Government of India, and a member of the Planning Commission. Probably, no other Committee had so many dignitaries as members It appeared to augur well for the future of Panchayati Raj

The Committee submitted its Report in August, 1978

The following is a brief summary of the recommendations (as far as possible, the wording conforms to the original).

i) General Approach. Both from the political and socio-economic angles, it is imperative to decentralise power, planning process and developmental activities

The Panchayati Raj Institutions have to be so designed that they can become effective channels of people's participation in growth—economic, social and political

Among the striking changes in rural India over the years, since the submission of Balwantray Mehta report in 1957 diversification, expansion and commercialisation of agriculture and allied sectors have involved a series of extra-local transactions (strengthening the two-way linkages between rural and urban areas), underlining the importance of growth centres on the one hand and group action and conjoint activities on the other. Target group oriented programmes have added a new dimension to such activities

The institutional and structural contours of Panchayati Raj, therefore, have to be in conformity not only with the accelerating pace of development but also with its strategies and policies. New structures of development administration or local level department management will have to take into account the functional necessities of the on-going developmental thrust. Panchayati Raj Institutions in the coming decades should, therefore, be equipped to undertake democratic development management under conditions of rapid changes, continuous growth and sustained innovations in all spheres of rural life.

(ii) Structure. The district (Zilla Parishad) should be the first point of decentralisation. The dynamics of development touched upon above requires that a high level of technical expertise be made available at district level, where planning of a more comprehensive and sophisticated kind can be undertaken, and concomitant administrative functions can be discharged, most fruitfully.

Considering the imperatives behind the growth centre approach and location-specific planning, and the balance between technological requirements and possibilities for meaningful participation of people in the management of developmental programmes, constitution of Mandal Panchayat, covering a group of villages with a population ranging from 15,000 to 20,000 (this would vary depending upon topographical and demographic factors), would be necessary to achieve the objectives mentioned above Next to the Zilla Parishad, therefore, the Mandal Panchayat will have to be the hub of developmental activities

Consequently, the Block would cease to be the basic unit of devolution. When smaller districts are constituted, and Mandal Panchayats are further strengthened, the Samiti's capabilities will get further weakened. Till its obsolescence in this perspective, it may continue. in the transitional phase, as an executive committee of the Zilla Parishad.

At the grass-roots level, the people would be involved in the Mandal Panchayats through Village Committees, which would look after municipal and related welfare functions. The Mandal Panchayat, as stated earlier, will

be the hub of developmental activities, spanning all the villages in its jurisdiction (or hinterland).

The Mandal Panchayat would consist of the following categories of members: *(a)* 15 members directly elected on village-cum-population basis; *(b)* Representatives of Farmers' Service Societies; *(c)* Two women securing the highest votes in Mandal Panchayat elections (if none contested, two women may be coopted) The President of the Mandal Panchayat may be elected directly or indirectly as the States may decide. Seats may be reserved for Scheduled Castes and/or Tribes

The Zilla Parishad should consist of six types of members. *viz.*, members elected from suitably demarcated electoral divisions (with provision for reservation for Scheduled Castes/Scheduled Tribes); Presidents of the Panchayat Samitis, *ex-officio,* nominees of bigger municipalities and district level cooperative federation, two women to be coopted, the procedure being similar to that in respect of the Mandal Panchayat, and two coopted members, one with special interest in rural development, and the other a college/university teacher.

The Chairman of the Zilla Parishad should be elected indirectly by all members, from amongst directly elected or *ex-officio* members.

The Samiti, as long as it exists, is to comprise of Zilla Parishad members elected from electoral divisions in the Samiti area, as mentioned above; Presidents of Mandal Panchayats, *ex-officio;* nominees of small municipalities and cooperative federation at this level; and one coopted member having special interest in rural development. The President is to be elected indirectly.

Vis-a-vis the Mandal Panchayat, the status and composition of the Village Committee are similar to those of the Samiti Besides the person/s elected to the Mandal Panchayat, it could comprise member/s elected to the Zilla Parished from the respective electoral units, and representatives of small and marginal farmers.

While the States should have sufficient scope for making necessary adjustments, it must be emphasised that decentralisation should be genuine and adequate, it should be regarded as a functional necessity, and not as an act of political charity or administrative concession Further, whatever be the details with regard to structural arrangements, the directly elected element must preponderate over the others at all levels

The Gram Sabha has an important role in activating the democratic process at the grass-roots and deserves genuine encouragement. The proposed Village Committees will have the special obligation to organise two Gram Sabha meetings every year to explain to the people what programmes the Mandal Panchayat are executing in the area and to channelise the feedback to the Mandal Panchayat.

The Nyaya Panchayats should be kept as separate bodies and should not be mixed with the people elected for development panchayats, whose members wield executive powers, there are chances that justice may suffer if the two functions are combined The Nyaya Panchayat, therefore. should be a separate body, presided over by a qualified judge, elected Nyaya Panches will be associated with him

(iii) Elections and Participation of Political Parties Panchayati Raj elections should be conducted by the Chief Election Officer of the State in consultation with the Chief Election Commissioner

The State Government should not supersede the Panchayati Raj bodies on partisan grounds. If supersessions become necessary, these bodies should be replaced by an elected body within six months. After the expiry of their term, elections should not be postponed.

Participation of political parties in Panchayati Raj elections would ensure clearer orientation towards developmental programme and facilitate healthier linkages with higher level political processes. Direct elections coupled with programme-based contests would offer greater scope to weaker sections for availing of the opportunities offered by the political system.

(iv) Finances The taxation powers given to the Panchayati Raj Institutions should be limited and specific and must not operate inequitously They should be assisted to establish remunerative enterprises. Apart from taxation powers, and financial assistance for specific purposes, a permanent annual grant at the rate of Rs. 2.50 per capita must be made available to Mandal Panchayats In the case of Zilla Parishads, transfer of programmes/projects, etc. must be accompanied by transfer of resources, and a suitable formula be worked out to regulate these transfers. Administrative expenditure on the salaries, allowances, etc of the staff transferred, should be given as grant to the Zilla Parishad and other tiers from the date of such transfer. A sufficiently high ranking officer should be placed at the district level, as the entire plan and non-plans funds would be under his supervision. And finally, a committee of the State legislature may be constituted to review the financial and physical performance of Panchayati Raj bodies; along with the consolidated statement of accounts, the State Government should also lay on the table of the house an Administrative Report on Panchayati Raj Institutions

(v) Weaker Sections Apart from the system of reservations, the following institutional devices are suggested · *(a)* Constitution of Social Justice Committees, presided over by persons belonging only to SCs/STs, *(b)* Constitution of a Committee of the Legislature to review the working of programmes meant for these sections. As far as possible, a majority of the members comprising the Committee should be legislators belonging to three sections, *(c)* There should be an independent authority to carry out

'social audit' of the funds and programmes earmarked for the Scheduled Castes and Scheduled Tribes, and to ensure that the intended objectives are realised

Besides these institutional devices, target group oriented programmes, leading to the diversification of occupations and higher productivity and employment and income levels, should be implemented by the Panchayati Raj Institutions more effectively, as these programmes have a direct impact upon their socio-economic well being.

(vi) Administration All developmental staff with the Zilla Parishad should be placed under an officer to be designated as the Chief Executive Officer of Zilla Parishad. The Chief Executive Officer will achieve horizontal coordination *vis-a-vis* the other district heads of development departments who will be the Secretaries of the respective subject committees of the Zilla Parishad He should be an officer of sufficiently senior rank, having 'done' a district for at least three years.

The Collector would continue to discharge regulatory functions.

(vii) Miscellaneous Training programmes should be improved and expanded with a view to increasing the operational effectiveness of developmental functions at all levels

Rural organisations—Cooperatives, Mahila and Yuvak Mandals—should be activised, and Panchayati Raj Institutions should play promotional and motivational roles

The merger of small municipalities with Mandal Panchayat would be desirable

Voluntary agencies with requisite expertise, proven standing and well-equipped organisation can assist Panchayati Raj Institutions in the planning process They can be involved in the formulation of projects and schemes and to create strong public opinion in support of measures aimed at social change

The Report, in its totality, could be considered a landmark in the evolution of Panchayati Raj in India, notwithstanding the fact that some of its important recommendations, particularly those relating to the participation of political parties and the Mandal Panchayat, have not found favour with a majority of State Governments. As the matters stand to-day, at a Meeting of the Chief Ministers held on May 19, 1979, a decision was taken to appoint a drafting Committee comprising a number of Chief Ministers and headed by the Union Minister for Agriculture, to prepare a draft bill. Some of the broad principles approved by the Chief Ministers were: The existing three-tier structure could be continued, the term of office of these bodies should be five years (instead of four as suggested by the Asoka Mehta

Report), supersession may be unavoidable, but elections should be held within 3 to 6 months

There was, above all, the decision that 'adequate powers and finances' should be devolved on the Panchayati Raj bodies Barring that part of the Reoprt dealing with the Mandal Panchayat, it can be said that the Asoka Mehta Report has provided not only a powerful impetus, but also life and blood, to this decision All other recommendations stand accepted, and can be expected to get reflected in the legislation which State Governments may enact in the near future

There is, therefore, sufficient basis for optimism about the future of Panchayati Raj in the country—Panchayati Raj as such, as distinct from the pattern suggested by the Asoka Mehta Report. Even that (the crux of which is 'Mandal Panchayat') is likely to receive better attention as the logic of Integrated Rural Development, now under implementation, unfolds. A close fit between the growth centre approach (integrated area development approach) and decentralisation of powers and functions to local levels, being an integral aspect of the I.RD. strategy (This is borne out by the recent publications of the FAO covering a large part of the developing world.) one might perhaps hope that experience will reveal the soundness of the recommendation of the Report in this regard. As for participation of political parties, it is hardly a matter for legislative fiat Political parties have been participating in Panchayati Raj elections, mostly indirectly, and it is unlikely that they could be persuaded to refrain from participation in future. In the circumstances, the case for 'open' participation of political parties appears to be a shade more plausible

These were, of course, some asides. They do not detract from the optimistic note struck earlier about the future of Panchayati Raj as such.

Panchayati Raj Bodies — State-wise
(As on 31 3 1978)

States/Union Territories	No of Gram Panchayats	No of Panchayat Samitis	No. of Zilla Parishads	No of Villages covered by Panchayats	Population covered by Panchayats (lakhs)	Average number of villagers per Gram Panchayat
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	16045	324	21	29131	3686 00	1.82
2 Assam	663	—	20+	19733	129 11	29 76
3 Bihar	11445	210	8	77947	507 19	7 00
4 Gujarat	12663	182	19	18697	195 96	1 49
5. Haryana	5165	83	—	6690	82 61	1 33
6 Himachal Pradesh	2033	69	12	16916	32 18	8 32
7. Jammu & Kashmir	1482	—	—	7124	37 92	5 01
8 Karnataka	8162	175	19@	29117	225 00	3 46
9 Kerala	974	—	—	1334	188 99	1 37
10 Madhya Pradesh	15274	390	—	71787	331 04	4 70
11 Maharashtra	23930	296	25	35778	351 22	1 46
12 Manipur	221	—	—	581	6 00	2 63
13. Meghalaya++	—	—	—	—	—	—
14. Nagaland++	—	—	—	—	—	—
15 Orissa	3830	314	—	50851	201 20	13 28
16. Punjab	9432	117	12	12188	103 34	1 29
17 Rajasthan	7297	232	26	35795	212 00	4 91
18. Sikkim	215	—	—	405	1 90	1 88
19 Tamil Nadu	12628	374	24@	16621	321 00	1 32
20. Tripura	689	—	—	871	14 00	1 26
21 Uttar Pradesh	72853	875	55	112624	759 53	1 55
22. West Bengal	19662	325	15	41392	328 68	2 10

Panchayatı Raȷ Bodıes — State-wıse — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
22 A & N Islands	38	—	—	163	0 60	4 28
23 Arunachal Pradesh	701	45	5	2776	4 10	3 96
24 Chandıgarh	22	1	1	22	0 24	1 00
25. D & N Havelı	10	1£	—	72	0.74	7 20
26. Delhı	204	—	—	258	4.19	1.26
27. Goa, Daman & Dıu	194	—	—	448	6 40	2 30
28 Lakshadweep++	—	—	—	—	—	—
29. Mızoram++	—	—	—	—	—	—
30 Pondıcherry	—	11	—	—	—	—
All-Indıa	225832	4033	262	589626	4412 56	2 6

\+ Mohkuma Parıshads

@ Dıstrict Development Councıls

£ Varıshtha Panchayat

++ There ıs no Panchayatı Raȷ set-up

Table 1 : Structure and Composition of Panchayati Raj Institutions

State	Strength and No. of seats	Composition/Election Procedure	Reservation & Cooption: Women	SC/ST	Others	Term	Remarks
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		PATTERN I					
Rajasthan							
1 Gram Panchayat	5–20	1 Panchas and the sarpanch elected directly by all the voters of the wards or constituencies	2	One each	—	5 years	—
		2 One Represetative of service co-operative society as Associate member					
2 Panchayat Samiti		1 Sarpanchas of all Panchayats in the panchayat samiti	2	Two each	—	5 years	—
		2 Local MLAs with right to vote but not to hold office					
		3 SDO with no right to vote					
		4 Elected members					
		5 One representative of service co-operative society					
		6 One representative other than co-operative society					
		7 Chairman of the marketing co-operative society					
		8 One additional member from among Pradhans, if not already a member					

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
3. **Zilla Parishad**		1 Pradhans of all panchayat samitis 2 Local MPs, MLAs, with right to vote and hold office 3 District Development Officer with no right to vote or hold office 4 Associate members President, Central Co-operative Bank 5. Chairmen of District Cooperatives 6. Additional members — Pramukh who is not otherwise a member of Zilla Parishad	2	One each	—	5 years	—
Andhra Pradesh							
1 **Gram Panchayat**	7–19	Members directly elected by the voters in the village The Sarpanch is elected directly and Up-sarpanch is elected from amongst the members of the gram panchayat	2–4	According to population (in proportion to SC/ST population)	—	5 years	—
2 **Panchayat Samiti**		1. Sarpanchas of all panchayats and town committees in the Block 2. Local MLAs, MLCs, with right to vote, but not to hold office 3. One person nominated by the District Collector for every unit for which the panchayat or town committee has not been constituted or no President or Sarpanch has been elected.	2	One each from SC/ST	2 persons interested in Rural Development	5 years	—

3. Zilla Parishad		1 Presidents of all the Panchayat Samitis in the district (Ex-officio members) 2. District Collector 3 Local MPs, MLAs, MLCs, with right to vote but not to hold office	2	One each from SC/ST	2 persons interested in Rural Development	5 years	—
Orissa							
1, Gram Panchayat	11–25	Members elected by the adult voters included in the electoral roll The Sarpanch is elected directly by Palli Sabha (Gram Sabha) and Naib Sarpanch is elected by panchas from among its members	—	According to population	—	3 years	—
2 Panchayat Samiti		1 Sarpanchas of all Panchayats in the Block 2. Chairmen of Municipalities and Notified Area Council 3 BDO and One officer each from the Development Deptt and the Revenue Deptt	1	one each	—	5 years	—
Bihar							
1. Gram Panchayat	9	Four among 9 members are elected by adults of Gram Panchayat through secret ballot and 5 persons are nominated. The Mukhia who is executive head is directly elected	—	According to the proportion of population	—	3 years	—

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
2. Panchayat Samiti		1 Mukhias of Gram Panchayats in the block 2 Chairmen of Municipalities and the Vice-Chairmen of Notified Area Committees 3 The Presidents of Union Boards Constituted in the Blocks, if any. (since deleted by an amendment, see amendment 4(b) 4. Three representatives of Cooperative Societies 5. One member of the Managing Committee of the Central Cooperative Bank 6 Local MPs, MLAs, MLCs with no right to vote	2	2 each if population exceeds 10 per cent	1) Two persons other than SC/ST 2) Two persons residing in Block with experience in administration, etc	3 years	—
3. Zilla Parishad (ZPs are existing in eight out of 31 districts)		1 All Pramukhs of Panchayat Samitis 2. Local MPs, MLAs and MLCs with right to vote but not to hold office 3 Three persons elected by electoral college of members of municipalities and Notified Area Committee 4. Two persons elected by electoral college of members of the managing committee of the Central Cooperative Banks	2	1 person each from SC/ST	1 person nominated by Karya Samiti of Bihar State Panchayat Parishad	3 years	—
Punjab							
1. Gram Panchayat	5–11	Members elected by the members of Gram Sabha The Sarpanch is elected by the Panchas from amongst themselves	2	1-2 According to the proportion of population	—	5 years	—

2. Panchayat Samiti		1 16 members elected by Panchas and Sarpanchas in the Block from amongst themselves 2 Local MLAs and MLCs without right to vote or hold office 3 SDO/BDO as ex-officio members (with no right to vote) 4 2 members representing cooperative societies and 1 representing market committees in the block elected by members of each body from amongst the producer members residing in samiti area	2	4 belonging to SC, 1 belonging to backward classes	—	5 years	—
3 Zilla Parishad		1 Three members from the Panchayat and coopted members of the Panchayat Samitis in the district 2 Chairmen of all panchayat samitis 3 Dy Commissioner (no right to vote) 4, Local MPs, MLAs and MLCs without right to vote or hold office	4	One from each panchayat samiti	2 belonging to backward classes	5 years	—
Haryana							
1. Gram Panchayat	5–9	Members elected by the voters The Sarpanch is elected directly by Gram Sabha	1	1–2 (SC) according to proportion of population	—	5 years	—
2. Panchayat Samiti		1 16 members elected by Panchas/Sarpanchas in the block 2 Two members representing Cooperative Societies 3 One member representing Market Committees in the Block 4 MLAs — Associate members 5. Sub-divisional, Block Development and Panchayat Officer—Ex-officio member	2	4	—	3 years	—

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Uttar Pradesh							
1. Gram Panchayat	7–15	Members elected by the voters of Goan Sabha and Up-Pradhan by the Panchas from amongst themselves	—	According to proportion of population	—	5 years	—
2 Kshetra Samiti		1. Pradhans of Gaon Sabha 2 Chairmen of Town Area and Notified Area Committee 3 2–5 representatives of Cooperative Societies 4 Local MPs, MLAs, MLCs with right to vote but not to hold office	5	8 SCs	2 persons interested in planning and development	5 years	—
3. Zilla Parishad		1 Pramukhs of Kshetra Samitis 2 Persons chosen by Kshetra Samitis specified by the State Government 3 Presidents of Muncipal Boards 4 Chairman/Administrator of a Cooperative Bank/District Cooperative Banks 5 A representative each from District Coop. Federation/Chairman, Coop Society, Cane Union 6. Persons (up to 3) chosen by the State Government from Social, Cultural, Professional or Literary Society 7. All local MPs, MLAs, MLCs with right to vote but not to hold office	3–5	3–10 SCs	—	5 years	—

Madhya Pradesh							
1. Gram Panchayat	10–25	Members elected by the members of Gram Sabha The Sarpanch and Up-Sarpanch are elected directly by the Gram Sabha members	2	One each or more acccording to population	—	5 years	—
2 Janapad Panchayat		1 15–30 members elected by panchas of Gram Panchayats 2 1 councillor representing Municipal Corporation, Council or Notified Area Committee 3 Local MLAs with no right to vote 4 One representative of cooperatives	2	1 each for SC/ST	—	5 years	—
Himachal Pradesh							
1 Gram Panchayat	7–11	Members are elected by the voters The Pradhan and Up-Pradhan are elected directly by the members of Gram Sabha	1–2	1–2 SC	—	5 years	—
2 Panchayat Samiti		1 Up to 20 members to be elected from the Block by Panchas, Up-sarpanches, and Pradhans of Gram Panchayats from amongst themselves 2. MPs, MLAs as associated members 3. Sub-divisional Officer as ex-officio member 4. Two members representing Cooperative Societies	2	4	—	5 years	—
3. Zilla Parishad		1 One representative of every Panchayat Samiti 2 The Chairman of every Panchayat Samiti 3 MPs, MLAs, MLCs 4 Deputy Commissioner of the district	2	2	—	5 years	—

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
		PATTERN II					
Gujarat							
1. (a) Gram Panchayat	7–15	1. Members elected by voters from single members wards—Sarpanch is directly elected, Up-sarpanch elected by members of Gram Panchayat	2	One seat more according to population	—	5 years	—
(b) Nagar Panchayat		15–21 members elected by voters of Nagar, Chairman and Vice-Chairman elected from among members themselves.	2	1 each	-	5 years	—
2. Taluk Panchayat		1. 15–31 from among the qualified voters of Taluk Panchayat	2–3	according to population	—	5 years	—
		2. Members elected by Sarpanchas of all Gram Panchayat (about 1/3) of total members at (a)					
		3 Local MLAs, President of Municipality, Local members of district panchayat (Associate members)					
		4. One representative each from district co-operative union, district cooperative bank, taluk cooperatives, purchase sales union, agricultural marketing produce committee					
		5. Mamlatdar or Mahalkari of the Taluk or Mandal.					

3 District Panchayat		1. President or Vice-President of evey Taluk Panchayat 2. 31–51 members elected among qualified voters 3 Local MPs, MLAs, Presidents of Municipalities, District Collector (Associate members) 4 One representative each from district co-operative bank, district cooperative purchase and sales union	3–5	According to proportion of population	—	5 years	—
Maharashtra							
1. Gram Panchayat	7–15	1 Election through secret ballot Sarpanch and Up-sarpanch elected from among themselves 2 Chairmen of co-operative societies as associate members	2	According to proportion of population as decided by collector	—	5 years	—
2 Panchayat Samiti		1 All councillors elected to Zilla Parishad directly from electoral divisions in Block, coopted councillors, if any 2 Members elected by direct election from electoral colleges in the Block 3 Chairman of Cooperative society dealing with agriculture	1	1 or 2	—	6 years	—
3 Zilla Parishad	40–60	1. Commissioners directly elected from electoral divisions in the district 2. Chairmen of Panchayat Samitis as Ex-officio councillors 3. Chairmen of 5 Federal cooperative Societies relating to credit, land development, marketing industrial co-operatives and co-operative training and education as associate members.	2	According to proportion of population	—	6 years	—

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8))
		PATTERN III					
Assam							
1. Gram Panchayat	up to 15	Members will be elected by voters, President elected directly by voters and vice-President by panchayat members from amongst themselves	2	One each if their population is more than 5 per cent	One representative of cooperative societies and Tea gardens	4 years	—
2. Mohkuma Parishad at Sub-divisional level		1 One councillor of the Mohkuma Parishad to be elected by voters of gram panchayat from amongst themselves	1	1 each SC/ST if population is more than 5 per cent	—	4 years	—
		2 One representative each from municipality town committee, Elementary Education, and Central Co-operative Bank (not being on number of state legislature or parliament)					
		3 Such other Govt officers as ex-officio councillors as the state govt. may appoint them from time to time, councillors from tea garden areas are also nominated					
West Bengal							
1 Gram Panchayat	7–25	Members directly elected by voters Pradhans and Up-pradhans are elected by the members from amongst themselves	2	2	--	4 years	—

2. Panchayat Samiti		1 Not more than 3 persons to be elected from each Gram within the block on the basis of population 2 Pradhans of all Gram Panchayat in the block as ex-officio 3. MPs, MLAs with right to vote but not to hold office	2	2	—	4 years	—
3. Zilla Parishad		1. Sabhapathis of Panchayat Samitis within the district, ex-officio 2 2 persons elected from block within the district 3. MPs, MLAs, with right to vote but not to hold office.	2	2	—	4 years	—

PATTERN IV

Karnataka							
1. Gram Panchayat	11–19	Members elected by voters—sarpanch elected from amongst members of Gram Panchayat	1–2	According to population	--	4 years	—
2. Panchayat Samiti (Taluk development board)		1. 15–19 members directly elected by ballot by the electorate of Taluk 2 Local MLAs and MLCs	2	According to population	--	4 years	
3. District Development Council		1. Deputy Commissioner as President 2. Local MPs, MLAs and MLCs with right to vote 3 Presidents of Taluk boards 4. Officers nominated by Government (Not exceeding 15)	1	1	--	4 years	—

Table 1 — (*Contd*)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Tamil Nadu							
1 Village Panchayat	5–15	Members elected by the voters President and vice-president elected by members from amongst themselves	1	Up to 3 according to proportion of population	—	5 years	Localities without less than 5000 persons and Rs 10,000 income are classified as town panchayats
2. Panchayat Union Council		1. President of every panchayat and non-official members of each township chosen by its members 2 Local MLAs and MPs with no right to vote or hold office	3	3	—	5 years	—
3. District Development Council		1 District Collector (as Chairman) 2 Local MLAs, MPs, MLCs with right to vote 3. Chairmen of panchayat union and municipal council 4. Presidents of Cooperative Central Banks 5. Officers connected with planning and development nominated by government	—	—	—	5 years	—

Table 2 : Administrative Powers and Functions of Panchayati Raj Institutions

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
		PATTERN I	
Rajasthan	Sanitation and conservancy, maternity & child welfare, water supply, promotion of agriculture, forestry, education, animal husbandry, dairy and cooperative farming, minor irrigation below 50 acres, and construction and maintenance of public streets, roads, drains, bunds and bridges, establishment of akharas, clubs, libraries, general census maintenance (population & livestock), organising voluntary labour, opening fair price shops, propagation of family planning, rendering postal services, securing life and general insurance etc	Execution of development programmes, promotion of agriculture, animal husbandry, cooperation, cottage industries, primary education (social education), communication, welfare of backward classes, housing, etc Undertake emergency relief, supervision and guidance of panchayats in all the activities, regulation of offensive trades, callings and practices	Coordinate and supervise the activities of Panchayat Samitis Examine budgets of Panchaya-Samitis, distribute Government grants among Panchayat Samitis, advise the Government on matters relating to Panchayat and Panchayat Samitis, etc
Andhra Pradesh	Sanitation, conservancy, water supply, construction and maintenance of roads, bridges, drains, etc , promotion of agriculture, cooperatives, cottage industries, etc , lighting, filling in of disused wells, cleaning latrines, opening and maintenance of cremation and burial grounds, preventive measures to any epidemic, registration of births and deaths, construction of dharmasala and its maintenance,	Execution C D programmes, Distribution of seeds, promoting agriculture, credit for agriculture purposes, promoting animal husbandry, establishment of primary health centres, maternity centres, drinking water facilities, sanitation, supervision of Govt hospitals, maintenance of Elementary Schools, Establishment of Mahila Mandals, Clubs, Libraries, Sanitary squads, Establishment of Cooperatives, Indus-	Examine and approve the budgets of Panchayat Samitis- Distribution of funds allotted to the district by Central and State Governments among Panchayat Samitis and blocks, coordinate and consolidate plans prepared in respect of blocks, secure execution of plans, projects, schemes and other works, supervision over

Table 2 — (*Contd.*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
	Promotion of Primary Elementary, Social and Health Education Cottage industries, Estt , of cultural centres, Seeds and Pesticides depot, encouragement of Co-operative management of lands, Estt , of cattle sheds, Provision for Veterinary relief, Control of fairs and festivals, Promoting Maternity and Child Welfare, Organisation of Voluntary Labour, Preparation of Statistics of unemployment, Opening Public Markets, Implementation of land-reform measures, Transfer of forest to any Gram Panchayats, Transfer of institutional works, Power of board of revenue to transfer or resume control of endowments and inams, Limitation to accept *donations, Transfer of Village* Panchayat Works, Maintenance of irrigation works, Execution of Kudimaramat, etc , Acquiring immovable property	tries, *Cottage* Industries, Child and Women Welfare, Institutions providing emergency relief, Collection of primary statistics, Encouraging self-help programmes, and management of trusts	Panchayat Samitis, power to levy tax, advise Govt on all matters relating to development activities, allocation of works, implementing any statutory of executive order, publish statistics relating to local activities, furnishing information of activities, Estt , and maintenance of Secondary, Vocational and Industrial Schools, and Z P may levy contributions from the funds of Panchayat Samitis in the district
Orissa	Sanitation and Conservancy, Construction and maintenance of Public Streets, Wells, Drains, Maintenance of Primary Schools, Medical Precaution, and Control of Epidemics, Maintenance of Statistical records,	Planning, Execution and Supervision of development works, Primary Education, Sanctioning of Panchayat's budgets, etc Other functions as may be assigned by the Government	

	Supervision and maintenance of Village and field boundary wells and soil conservation work, promotion of Agricultural Improvement, Animal Husbandry, Assisting and advising Agriculturists in obtaining Government and Cooperative loans, Development of Cooperative Institutions		
Bihar	Water Supply, Medical relief, Rural Development, Maintenance of Village roads and streets, and Development of Agriculture	Planning and Execution of all programmes concerning, Agriculture, Animal Husbandry, Irrigation, Co-operation, Education and Social Education, Public Health and Rural Sanitation, Cottage Industries, Inter Village Communication, Collection of Statistics, Other programmes for Economic and Social Welfare of the people and functions entrusted to it by the Government	Preparation of plans, Scrutiny and approval of Samiti budget, distribution of funds allotted by Central and State Governments among Samitis/Block, Coordinate consolidate and generally supervise works and plans of Panchayats and Samitis, Advise Government on development activities, Establish, maintain or expand vocational and industrial Schools, Exercise all powers and functions of the District Boards, and collection of data and public statistics, etc.
Punjab	Sanitation and Conservancy, Maternity and Child Welfare, Water supply, Promotion of Agriculture, Forestry, Animal Husbandry, Dairy farming and Cooperative farming, Maintenance of minor irrigation works below 50 acres, Grazing lands, etc , Construction and maintenance of public streets	Execution of development programme, Promotion of Agriculture, Animal Husbandry, Cooperation, Cottage Industries, Primary Education, Social Education and Communication, Welfare of the backward classes, Housing, Undertaken emergency relief, Supervision of Panchayats in all their activities.	Advise, Supervise and Coordinate functions of Samiti Approve Samiti budgets, Advise Government on development activities, Perform such other functions as Government may entrust, etc.

Table 2—(*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
Haryana	Sanitation and Conservancy, Maintenance of Roads, Buildings, etc, Maintenance of Maternity and Child Welfare Centres, Promotion of Agriculture, Supply of Water, Organisation of Voluntary force, etc	Execution of C.D Programmes, Promotion of Agriculture, Cooperatives, Cottage Industries, Fisheries, Animal Husbandry, Health, Sanitation, Communications, Social Education, etc Supervise and Assist Panchayats	
Uttar Pradesh	Sanitation and Conservancy, Construction and maintenance of Public streets, Wells, Tanks, etc, Establishment of Primary Schools, Maintenance of Maternity and Child Welfare centres, etc	Establishment and maintenance of Primary Health Centres, Maternity and Child Welfare Clinics, Dispensaries, Veterinary Hospitals, Primary Schools, Drainage Works, Minor irrigation works, etc, Water supply, Preparation of plans for the khand and revision of plans prepared by Gaon Sabhas, Development of Agriculture, Animal Husbandry, Cooperation, and Cottage industries, Approval of Panchayat budgets and General supervision of Panchayats	Classification of fairs, festivals, roads, etc General supervision of Gaon Panchayat and Kshetra Samitis, Construction and maintenance of public roads, bridges, hospitals, maintenance of Schools above Primary stage and up to Junior or High Schools, libraries, water supply, preparation of district plans and review of the Co-ordination of Kshetra Samiti plans, Distribution of ad hoc grants allotted by Govt. or other bodies
Madhya Pradesh	Sanitation and Conservancy, Promotion of Agriculture, Cooperatives, Cottage Industries, Minor irrigation works, Water supply, Organising collective farming and other civic functions	Execution of C. D programmes, Supervision and assistance to Panchayats, Collection of Statistics, Promotion of Agriculture, Fisheries, Cooperatives, Cottage Industries, Health, Education (Social Education), etc.	

Himachal Pradesh	Construction and maintenance of roads, bridges, wells, etc , Maintenance of Primary schools, libraries, maternity and child welfare, promotion of agriculture, industries, etc	Promotion of agriculture, animal husbandry, fishery, health and rural sanitation, communication, social education, cooperation, industries, maintenance of schools, etc	To advise administration on development schemes, plans, projects, etc , condition of the activities of panchayat samitis, periodical review of development programmes in the district, etc
		PATTERN II	
Gujarat	Sanitation, Conservancy, Improvement of public health, maintenance of hospitals, dispensaries, maternity and child welfare, drinking water, construction of roads, drains, bridges, maintenance of slaugther houses, lighting, maintenance of markets, cattle sheds, library, promoting child welfare education Preparation of plans for development activities, control over fairs, pilgrims, and bazars Organising voluntary labour, promotion of agriculture, animal husbandry, minor irrigation and cottage industries.	Family planning, providing drinking water facilities, construction of village roads, establishing primary schools, assistance to educational activities of gram/nagar panchayats Establishing information centres, training of gram sevikas, gram laxmis, and sevak, promotion of child and women welfare, planning for increased employment and production, agril production and improvement, construction of irrigation works, promoting cooperatives and cottage and small industries, provision for hostels for backward classes (SC/ST), improvement schemes of rural housing.	Construction of tanks, wells for drinking water, establishment of primary health centres, dispensaries, family planning programmes, training of midwives, construction and maintenance of roads, execution of works entrusted by govt undertaking educational activities entrusted to them, plan preparation for projects, undertaking intensive pioneering schemes relating to paddy, wheat, cotton, etc , construction and maintenance of buildings for seed distribution centres, undertaking minor irrigation schemes preferably on cooperative basis, implementation of key village schemes, storage of grass, poultry farming, etc , establishing veterinary hospitals and dispensaries, examining possibilities of small and village industries,

Table 2 — (*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
			aiding secondary, technical, industrial schools, etc., assistance to the social service institutions, arranging fairs and festivals.
Maharashtra	Promotion of Agriculture, animal husbandry, forests, social and cultural welfare, education, medical and public health, buildings and communications, irrigation, industries and cottage industries, cooperation, self-defence and village defence, undertake development schemes which the state Government or Zilla Parishad and Panchayat Samiti entrust.	Prepare overall plan of works and development schemes to be undertaken in the Block for being considered by the Zilla Parishad in preparing the plans, prepares a plan of works and development schemes to be undertaken from Block grants, sanction, execute, supervise and administer any works or schemes from Block grants and development schemes of Zilla Parishad, undertake such activities like agricultural development, health and sanitation, etc.	Establish, manage and give grants to agricultural schools, distribution of fertilisers, etc., improvement of livestock and veterinary. Aid and educational development of backward classes including grants of scholarship, maintenance of hostels, etc., economic development and programmes for welfare of backward classes, establishment, maintenance and inspection of primary, basic and secondary schools, dispensaries, hospitals, primary health centres and maternity and child welfare centres, construction and maintenance of roads, parks, lights, railways, tramways and telephonelines, water supply and drainage works, promotion and execution of cooperatives, rural broadcasting, C. D. and local

			development works, social education, rural housing, village uplift, maintenance of poor houses, etc
		PATTERN III	
Assam	Sanitation and conservancy, maternity and child welfare, construction and maintenance of roads and drains, bridges, etc., promotion of agriculture, cooperation and cottage industries		Approve budgets of Gram Panchayats, coordinate and supervision of works, advise government on development schemes and distribution of funds
West Bengal	Sanitation, conservancy and drainage and prevention of public nuisances, preventive measures in malaria, small pox, etc , supply of drinking water, maitenance, repair and construction of public streets and protection, removal of encroachments, management and care of public tanks, common grazing grounds, burying ghats and public graveyards, supply of local information to district magistrate, zilla parishad and panchayat samiti, organise voluntary labour for community works, the control and administration of the gram panchavat fund, the imposition, assessment and collection of the taxes, rates of fees leviable, the maintenance and control of dafedars and chowkidars, duties imposed by the constitution and	Undertake schemes or adopt measures, financial assistance relating to the development of agriculture, livestock, cottage industries, cooperative movement, rural credit, water supply, irrigation, public health and sanitation including establishment of dispensaries and hospitals, communication, primary or adult education, undertake execution of any scheme, performance of ayacut or management of any institution or organisation entrusted to it by the State Government or any other authority, make grants-in-aid of any school, public institution or welfare organisation, make grants to the Zilla Parishad, Gram Panchayat, adopt measures for the relief of distress, coordinate and integrate the development plans and schemes prepared by gram panchayats,	Undertake schemes or adopt measures, financial assistance relating to the development of agriculture, livestock, cottage industries, cooperative movement, rural credit, water supply, irrigation, public health and sanitation including establishment of dispensaries and hospitals, communication, primary or adult education, undertake execution of any scheme, performance of ayacut or management of any institution or organisation entrusted to it by the State Government or any other authority, make grants-in-aid of any school, public institution of welfare organisation, establish scholarship or

Table 2 — (*Contd.*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
	administration of Nyaya Panchayats, primary,social,technical or vocational education, rural dispensaries, health centres and maternity and child welfare centres,management of any public ferry, irrigation, bringing waste land under cultivation,promotion of village plantation, arranging for cooperative management of land and other resources of the village, assisting in the implementation of land reforms, schemes formulated by State Government and field publicity, maintenance of lighting sinking of wells and excavation of ponds and tanks, improved breeding of cattle, medical treatment to them, introducing and promoting cooperative farming stores, trades and callings, construction and regulation of markets, allotment of places for storing manure, assisting and advising agriculturist in obtaining the State loans,promotion of cottage industries, construction and maintenance of sarais,dharma shalas, rest houses, etc., establishment of libraries and reading rooms, maintenance of records of census, etc , rendering assistance in extinguishing fire and protecting life	examine and sanction the budget estimates of Gram Panchayats, Pauchayat Samitis may execute the scheme if it extends to more than one gram, transfer roads or propeties to the State Government or Zilla Parishad, maintenance and control of any road bridge, tank, ghat, well, channel or drains, belonging to a private owner, supervision over gram panchayat on matters of policy or planning for development, prohibit certain offensive and dangerous trades without licence and to levy fee, to grant licence for hat or market	award stipends within the state for technical and special forms of education, acquire and maintaining village hats and markets, make grants to panchayat samiti or gram panchayats, adopt measures for the relief of distress, coordinate and integrate the development plans and schemes prepared by panchayat samiti in the district and examine and sanction the budget estimates of Panchayat Samiti in district, advise the State Government on all matters relating to the development work among gram panchayats and panchayat samitis, undertake or execute any scheme if it extends to more than one Block, to have powers of magistrate in district to which the vaccination Act extends, control and maintenance of roads which run through a municipality works can transfer to State Government or Panchayat Samiti.

	and property, Prevention of burglary and dacoity and any other work of public utility which is likely to promote health, etc		
		PATTERN IV	
Karnataka	Sanitation and conservancy, construction and maintenance of village wells, roads, bridges, etc, promotion of cottage industries, cooperation, promotion and development of economic conditions with specific reference to agriculture, supply of water from panchayat water works, maintenance of fairs, festivals, etc	Construction and maintenance of public roads, minor irrigation works, promotion of agriculture and cooperation, etc, supervise and assist panchayats, famine relief works, promotion of primary and secondary education, cooperative societies, industry and commerce, amelioration of scheduled castes, etc.	Scrutiny and approval of the budgets of Taluka Boards, reviewing the work of the Taluka Boards when it is sought and consideration of the work of the Taluka Boards where the work or the programme pertains to more than one Taluka
Tamil Nadu	Construction, maintenance of village roads, drains etc., sanitation and conservancy, water supply, etc	Construction, maintenance of public roads,etc, establishment of dispensaries, maternity and child welfare centres, promotion of agriculture and cottage industries, elementary education, execution of development schemes	Advise government on development schemes, classify markets, roads, etc, as panchayat or panchayat union markets, roads, etc

Table 3 : Financial Resources of Panchayati Raj Institutions

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
		PATTERN I	
Rajasthan	Grants from Government, Fines, Licence fees, Tax on buildings, Vehicle tax, Tax for arranging the supply of drinking water, Tax on commercial crops, Grants-in-aid, Pilgrim tax, Cattle ponds, Any tax sanctioned by the Governent, loans and gifts	Share of land revenue, grants transferred by various departments of Government, Grants and contributions by various Institutious and bodies, Loans received from the State Government	Government Grants, Contributions from Panchayat Samitis or from the public
Andhra Pradesh	Land Revenue — 25 paise per rupee 25 per cent of Cess or Revenue, House tax, Professional tax, vehicle tax, duty on transfers of property 1/4 of land cess, pilgrim tax, payments by market committees, Income from endowments and trusts, fisheries and ferries, leases of government property and net assessment on service inams, 9/10th of fines imposed by magistrates in respect of village under the Act, Government grants, Public contributions and toll tax	Grants from State Governments share of land revenue, state taxes and fees, funds relating to C D programmes Funds transferred by government or head of the departments for certain schemes, central and state, and received from all-India bodies and institutions, Donations and contributions received from panchayat or from Town committees	Grants from State Government shares of land revenue, state taxes and fees, grants from central and state governments, grants from all-India Bodies and Institutions, income from endowments or trusts administrated by Zilla Parishad, from the Panchayat Samiti or from the Public and income from Blocks for which Panchayat Samitis are not constituted
Orissa	10 paise per rupee on rates of cess on revenue Professional tax, conservancy tax, vehicle tax, toll tax, income from tanks, market, fisheries, cattle ponds, charges of irrigation pump supplied by Government, village orchards, fee on cart stands, interest	Share of cess on land revenue, State taxes and fees, funds relating to C D Programme ; funds transferred by Government's or Heads of Department for certain Schemes, share of Kendu leaf grant in Kendu leaf growing areas Central and state aid received from all India	Zilla Parishad abolished in 1968

	on paddy deposited in Gram Golan Cooperatives and Government grant and loans, Kendu leaf grants in Kendu leaf growing areas and cess grant	bodies and institutions, donations and contributions received from Panchayats and public, grants from organisations and statutory bodies, income from endowments trusts and other institutions.	
Bihar	Property tax, land revenue 6¼%, licence fees on professional buyers, brokers and Commissions agents, trade tax, vehicle tax, registration fee for animals, fees on Sarais, rest houses, camping grounds, etc., pilgrim tax, profit from execution of development works.	Share of local cess and revenue grant-in-aid received from the government, grants and funds transferred by State Government for certain schemes and Institutions Irrigated tax, water tax on piped drinking water, annual registration fees on cycles, cycle rickshaws, tandors and any other than motor vehicle, proceeds from surcharge and fees, tolls on fairs, hats, ferries. Proceeds from fees which the Panchayat Samiti is empowered to levy Aids received from all-India bodies, ad-hoc grants received from or through Z Ps donations, and contributions received from Gram Panchayats, Municipalities, Notified Area Committee, members of the Public or Institutions, income arising from leases granted by the Panchayat Samiti of Public ferries and fairs and hats, loans received from the State Government	Share of land revenue, local cess grants from Central and State Government, Forest Revenue, Grant from the State Government, grants fram all-India Bodies and Institutions Donations and contributions from Panchayat Samiti or from members of Public or any Institutions. Income from endowment and trusts administered by it Income from block for which no Panchayat Samitis have been constituted, loans from the State Government and raised by the Panchayat Samiti.
Punjab	Out of the 50 per cent of the total land revenue, 40% is given to gram panchayats (from 1978–79), Government waste lands are vested in panchayats, House tax, profession tax with pre-	Out of the 50 per cent of the land Revenue, 10 per cent to Panchayat Samiti and Zilla Parishad (from 1978–79) Fixed percentage of local rate to P S A Panchayat Samiti may impose any tax for	Share of land revenue 10 percent to P S /Z. P from (1978–79) Local rate at 50 paise per rupee of the annual value of the land, Fixed percentage of

Table 3 — (*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
	vious approval of Government, duty on transfer of property not exceeding 2 per cent, Development grants from Government and local bodies, income from Shamlat lands, donations, contributions and other taxes, Teh-Bazari fees, sarai fees including cleaning and lighting the street and sanitation, fee for registration of animals, water rate	which the State legislature has the power under the Constitution of India, Government grants under the C D Programmes, grants by the various development departments of the Government for the execution of development schemes entrusted in the Panchayat Samitis under Section 42, ad hoc grants from the State Government aggregating to 10% of land revenue Income from properties and other assets, fees levied for the use of benefits derived from public hospitals, dispensaries, schools, sarais, markets, rest houses, supply of water for drinking purposes, fees on fairs, agricultural shows and industrial exhibition, tonga tax, chhaki tax, rickshaw tax, oil engine tax, sawmill tax, rehri tax, Brick kiln tax	local rate to Z P /P S subject to maximum of 80 per cent and minimum of 25 per cent to Zilla Parishad and the rest to P S. Grants from Government Share of land cess, State taxes Ad hoc grant on account of 10 per cent of land revenue, development grant to six Zilla Parishads share of fees as may be prescribed by the State Goverument. Grants from all-India Bodies, income from endownments of trusts administrated by them, income of the old District Boards as the Government may, by order allocate to them, donations from Public contribution as may be levied on Panchayat Samitis
Haryana	Sixty per cent of the local cess rate is given to Gram Panchayat Maximum of 3% of the total annual land holding tax to Gram Panchayat, house tax, profession tax, duty on transfer of property, any other tax the State Legislature can impose, Teh bazari fees, Service fees, fees for registration of animals, water rate special	Forty per cent of the total local cess is given to the Panchayat Samiti, 7% annual land holding tax to the Gram Panchayat Panchayat Samiti may impose any tax for which the State Legislature has the power under the Constitution of India It may levy fees for the use of or benefits from Panchayat Samiti	Zilla Parishads abolished in 1973

	tax on adult males of the Panchayat for construction of Public works of general utility.	a) Public Hospitals, dispensaries, schools, Sarais, markets, rest houses and other public institutions. b) the supply, storage and preservation of water for drinking, bathing and agricultural purposes. c) preservation and reclamation of soil and drainage and reclamation of swamps. d) Fees on fairs, agricultural shows and industrial exhibitions held under its authority e) Taxes levied, cycle token tax, oil engine licence fee, vehicle tax, tonga tax, licence fee (electric motor), bones and hide tax Government grants under C. D. Programme, Government grants by the various development schemes entrusted to the Panchayati Samiti under Section 42 of the Act, Ad hoc grants from the State Government aggregating to 10% land revenue. Income from ferries and fairs, share of receipts from cattle fairs, income from immovable properties vested with the Samitis.	
Uttar Pradesh	Fees from markets and Water tax, House tax, Tax on animals and their registration, tax on slaughter houses, entertainment tax on cinemas, Tax on vehicles run on hire. Arrears can be collected as arrears of Land Revenue.	Grants and Contribution for C. D. Programme. Licence fee on brokers for the service bulls and stallions tax on vehicles, pack animals or porters. Fee on registration of animals sold in the market. Fees at fair, markets, agricul-	Grants from the state government, toll, and fees, etc., Income from property and loans from the State Government.

Table 3 — (*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
		tural shows and industrial exhibition, fees for the use of property, loans from State Government.	
Madhya Pradesh	Partially collects the land revenue, 25% of the land revenue is transferred to the PRIs in the ratio of 5 12·8 for Gram/Janpad Panchayat, 10 paise per rupee Janpad Panchayat can impose cess of 15% of Land Revenue At the intiative of Z P the maximum 90% cess can be levied Entire receipts to Panchayats, amount received as a result of enhanced cess can be divided between the Z. P and G P. in the area in 3.2 ratio Tax on building based on Capital value, exceeding 1000 rupees. Tax for cleaning private latrines, lighting tax, profession tax, fees as registration of animals sold, market fees for the Stalls and for goods brought for sate in the market, Tax on building of capital value of total Rs. 1000, fees for sale of goods and animals in panchayat markets, tolls on vehicles and pack animals used for riding, driving drought, or turden or own dogs or pigs, tax on carts plying for hire, bicycle, rickshaws, fees for the use of Sarais, Dharma-	Janpad Panchayats may levy a tax on new bridges constructed by the Janpad Panchayats and a tax on the theotrical performance, and other shows or public amusement, additional stamp duty of one half percent on transfers of immovable property Fees for any licence or permission for occupation or use of lands and other property vested in or maintained by Janpad Panchayat Funds	

	salas, rest houses, slaughter house and encamping grounds, fees on person practising the Calling of buyers, brokers, weighers, water rate, drainage fees, sanitary cess, fees on carts stand, etc. Any other which the State Legislature has powers to impose under the Constitution of India.	
Himachal Pradesh	An amount equivalent to 20% of the total land revenue realised within the state is placed at the disposal of the Director who may appropriate the amount for discharging the liabilities of the Gram Panchayats and may allocate the remainder, if any, to the Gram Panchayats in given proportion as may, from time to time, be decided by government Local rate at 35% of the annual land revenue Sixty per cent of this goes to Gram Panchayat House tax, Teh bazaris fees, service fee, fee for registration of animals sold in Sabha area and water rate Government grants, public contributions, special tax on adult male member of the Panchayati area for the construction of any public work of general utility for the inhabitants of the area, donations fees, etc.	40% of the annual cess, local rate, C D. Programme, Funds transferred by the Government or head of departments for certain schemes, Samiti fees, etc. Income from property owned by the Samiti Donations, loans from the grovernment. Any tax which Legislative Assembly of H. P. can impose with the prior approval of the Government. Fees for the use of or benefits from public hospitals, dispensaries, schools, sarais, markets, rest houses and other public institutions, the supply of storage and preservation of water for drinking, bathing and agricultural purposes Preservation and reclamation of soil and drainage and reclamation of swamp Fees on fairs, agricultural exhibitions, held under authority, profession tax with the approval of Government.

Table 3 — (*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
		PATTERN II	
Gujarat	Share of land revenue, after deducing 35% towards the talatics and mantris and 5% towards State equilization fund out of remaining 50% distributed to Gram Panchayats Additional cess of ₹25 paise per rupee of land and revenue may be levied for a specific period On request it may be permitted to increase cess up to 100% of land revenue. Additional cess levied at the request of Panchayats is paid to the concerned panchayat, deducting expenses, tax on building and land and two other taxes or fees referred in Sub section (1) of the Section 178 Octroi, pilgrim tax, tax on fairs and festivals and other entertainments, professional tax, general sanitary cess, general water rate, any tax which the legislature has power to impose, weekly bazars, fee on cart and tonga stand, special water rates for piped water, special sanitary cess on private latrines, drainage, lighting tax, village panchayat cess u/s 181 (not exceeding 25 paise on every rupee of land revenue) and	Education cess, taxation and fees leviable by Gram/Nagar Panchayat, proceeds fees, enhancing the stamp duty up to 15% which Taluk Panchayat is empowered to levy. Share of land revenue contribution from Government proceeds from fee which the Taluk Panchayat is about to levy Contribution from district panchayat, income from property, vesting in taluk panchayat, loans received from the State Governments	Proceeds from levy which the District Panchayat is empowered to levy District panchayat has also power to levy simultaneously taxes leviable by Gram/ Nagar panchayats It can apply for all increase in stamp duty and transferred of immovable property up to maximum 10% It can levy education cess Share of land revenue, and forest revenue, grant from the State Government Proceeds from fees which the District Panchayat is empowered to levy Income from property vesting in district panchayat and loans from State Government

	cess on water rate under Section 171 (not exceeding 20 paise on every rupee of water rate)		
Maharashtra	Entire land revenue of the village — increased rates of cess, i e, 20 paise or such increased rates not exceeding 200 paise on every rupee on land revenue increased levy in their area—it can increase cess not beyond 200 paise per rupee of land revenue, and cess of 20 paise per rupee on water rate. Tax on land, buildings, betterment charges on land benefiting from schemes or projects undertaken by Panchayats from village fund. Contribution from State Government, Z. P, Panchayat Samitis, fees for clearing cess pool, donations or gifts, pond fish compensation, complaints, and suits, sale proceeds of all dust, dirt, dung and refuge of all carcass of animals, income from properties vested in Panchayats, taxes levied for institutions and suits and courses. Taxes and fees leviable by panchayats or Octroi, pilgrim tax, tax on fairs, festivals, entertainments, bicycles, vehicles drawn by animals Professional fare, general water rate, lighting tax, any tax which the state legislature has under the constitution and power to tax on court stands, special water rate for	Grants from State Government to collect or recommend increase in land revenue cess rate	Cess on water rate, pilgrim tax, special tax on land and building Z. P. can recommend the cess increase on land revenue, cess on water rate It can plan, grant local cess, matching grant, incentive grant, stamp duty grant, forest revenue grant, establishment grant, compensation to Z P on account of taxes on various grounds, and tax on trades, callings and employment licence fee on borrowers, commission agents, market fee on sale of goods of animals in the market. Income from property and loan from the State Government.

Table 3 — (*Contd*)

State	Gram Panchayat	Panchayat Samiti	Zilla Parishad
	pipewater, tax on supply of water, sanitary cess on private latrines, fee for grazing cattle, fee on registration of animals sold in this market place		
		PATTERN III	
Assam	Share of land revenue 45 paise per capita to Gram Panchayat per cent of cess out of local rate collection in its area, Gram Panchayat is paid at 25 paise per capita population Local rate, Government grants, public contributions, loans, tax on private hat or market places, cattle ponds, house supply of water, tax on sale of fire-wood or thatch or bamboo, conservancy, lighting and slaughter houses, tax on shops, pharmacys, tailoring, laundry, hair cutting saloon,carpentry works and automobile workshops, tax on cultivated land, collection of bones and hide,fish and fishing, water cess, minor irrigation; licence fee on running tea shops, cart and carriages	—	Grants from State Government, (expenditure on establishment), Shares from bazar, ferry and receipts, panchayats tax on every household profession tax, licence fee for cinema halls, bricks or tile kilns, saw mills, timber depots, petrol and diesel sales depot, oil mills, rice mills, extra charge on local rate
West Bengal	10 per cent share of land revenue, 12 paise cess per rupee as rate of cess on revenue, 100% cess money given	Grants and contributions by the Union and State Governments. Share of land revenue, allotment by Z P. transferred	Grants from the Central and State Governments,advances for special purposes, shares of land

tronic medium—television. A survey of the adoption of High-yielding Varieties of foodgrain gave radio an important place in the adoption programme[40]. Of the adopters of hybrid wheat, 3.3 per cent attributed their motivation solely to radio and 3.6 per cent of hybrid paddy adopters reported likewise.

In an experiment conducted in Uttar Pradesh, radio ranked fifth in effectiveness in a list of eight communication media. Yet, a combination of radio, slide show and field trip was identified as the most effective media mix to communicate crop technology[41].

Farm and Home Units were started in 10 stations of All India Radio in 1966 to support the Intensive Agricultural District Programme (IADP). Now, 49 stations in the country have these units, each headed by a Farm Radio Officer. Six units were proposed to be added this year. Gradually, every radio station in the country will have a Farm and Home Unit. Their purpose is to serve the farm community — an enlargement of the original IADP objective. Currently, programmes put out by them about various aspects of agriculture are the main constituent of radio's rural programmes. The heavy dependence of these rural programmes on agriculture has resulted in a neglect of the 'home' segment, and other non-farm areas as well.

A research project in progress reports a cultivator as saying "If a farmer has a radio and listens to it regularly, extension workers become unnecessary"[42]. While this may not be altogether true, it does indicate that with all its shortcomings, radio seems to have acquired a definite place in rural life and economy

However, radio can be said to have derailed somewhere during the course of its long existence It has never moved as much with developmental programmes as it could have Attempts have never come off in developing it as true medium of public guidance or of public expression. Radio remains traditionally urban, and entertainment–oriented so does its audience.

It might not now or in the future be possible to organize active group listening. This is perhaps attributable to two factors—the alienation to radio from popular concerns as well as its spread in the form of a portable receiver set. Those fortunate enough to possess a radio set generally listen individually Perhaps these are the reasons why it may not be possible for radio to create and hold an enthralled rural audience as in 1959, or to reach groups, generate discussion and community action on development as it did then.

Television The most "glamorous" of India's mass media was inaugurated the same year as Radio Rural Forums Since 1959, Indian television has moved "in fits and starts" to its present status of 18 stations telecasting to half-a-million receiver sets. Seven of these are "rural" trasmitters, of which six were established as part of the SITE Continuity service. Initially

set up as a wing of All India Radio, television was formally delinked into a separate organisation only in 1976

Four notable attempts at using television for rural development are *Krishi Darshan,* the Satellite Instructional Television Experiment (SITE), SITE Continuity, and the Pij or Kheda television experiment run by the Indian Space Research Organisation (ISRO).

Krishi Darshan began in 1967 with bi-weekly agricultural programmes for 80 rural teleclubs around Delhi. Several social scientists have sought to isolate the effect of *Krishi Darshan.* One study conducted in 1974 found that it had contributed to knowledge of viewing farmers and their proneness to change. Information gained from *Krishi Darshan* was seen to be retained and transmitted to people who had not seen it—this category of "secondary viewers" (or "surrogate" viewers) was also seen to have retained a good deal of information originating from television Farmers seeking information were also seen to possess a tendency to adopt innovations promoted over *Krishi Darshan* — a tendency that in no way diminished with diminishing formal education[43]. The study conclusively heralded happy portents for rural development in India.

Another survey conducted put *Krishi Darshan* in the perspective of overall television impact. In spite of initial interest, television's main focus had already been taken over by urban-oriented entertainment (Table 5) *Krishi Darshan* was the least favoured programmes, even in the villages[44].

Table 5 : The Composition of the TV Programmes from Delhi in early 1974

		Per cent
Entertainment Films, Plays, Variety		31
Information · News, Talks, Discussions		22
Magazine Programmes, Quiz, Camera reports, etc which are partly entertraining and partly informative		19
Programmes for women, children and youth which are intended to be useful		9
Programmes for teleclubs	Urban	2
	Rural	5
Miscellaneous programmes of entertainment or information including those from other Centres		12
		100

Source. *Broadcasting and the People,* Mehra Masani, National Book Trust, New Delhi, 1976

In addition, a majority of farmers perceived the medium of television (as distinct from the *Krishi Darshan* series) as being suitable for educated urbanites rather than an average rural person[45]

While the studies may seem to reach contradictory conclusions, they are not really so The first viewed television as a conveyor of change and development information within certain specifications and limitations, it was seen to be a most positive medium The second reveals the hurdles that policy, orientation and control can pose a medium which seeks to serve two masters in spite of the promise that a 'minor' objective holds, the bigger master can swamp it completely This is precisely what happened in *Krishi Darshan.*

SITE was not likely to face much problems when it began in August 1975, since it was only beamed to villages. This year-long experiment in satellite technology and developmental communication reached 2,400 villages in six states. Each state received, in its own language, 22½ minutes of daily morning telecast for school children and 45 minutes for general audiences every evening. The objective was to contribute to rural change in the fields of agriculture, health, family planning, education, and social attitudes. It is possible, as one researcher notes, that SITE was more a learning experience in the management and maintenance of a development-oriented satellite system than a successful attempt at effecting rural change.[46]

If SITE was new to communication planners, it was still more so to other administrators All the ministries concerned were involved and asked to suggest fit topics for treatment and telecast. Many development ministries, for their part, responded by using separate cells to "handle" this new and challenging medium Karnataka state appointed a Coordinator at the Secretariat

Once the experiment ended in July 1976, it was proposed to install terrestrial transmitters in each of the SITE states SITE Continuity transmitters have been set up in Hyderabad, Gulbarga, Muzaffarpur, Jaipur, Raipur and Sambalpur.

SITE Continuity is not working as well as it should and at least two centres have been "urbanized" for nearly the same reasons parallel to those—that prevented the all-India replication of the Poona RRFs from being as successful as the original This is not to suggest that SITE was an unqualified success—merely that its planning, organisational fervour, personnel enthusiasm and departmental linkages are unrepeatable for want of clear policy, direction and control.

While SITE Continuity limps from its inception in 1977, another venture in programming for community television being conducted in Kheda seems full of promise. Rather than be a one-way channel from development agencies to people, the Kheda experiment has often proved that two-way communication achieves understanding and results

With a heritage of media—particularly television—losing focus once they are institutionalised, the Kheda experiment stands out as a solitary example that belies the accompanying pessimism.

Though television is two decades old, it is still the infant among the media in terms of growth. It may grow to be the most widespread of all media in the country, particularly with INSAT* expected in 1981, and the possibility exists of its being a potent force. However, the high cost of both programming and receiver sets negate its potential. Community viewing is an answer—as in all rural television efforts in India—but even this entails investment in half a million sets, many of which have to be battery-powered. The present rural television situation in India is, on the whole, depressing Of the half-million or so sets in the country, no more than 5,000 are in villages (Table 6).

Table 6 : Number of Community-viewing Television Sets in Rural India

Community sets in Delhi rural, Delhi urban and Haryana		857
Srinagar Anantrega Baramula		550
Bombay		235
Calcutta		125
Lucknow		250
Madras		125
Punjab		125
SITE (Continuity)		2330
	Total	4597

Source *India . A Reference Annual 1977-78,* Research and Referencre Division, Ministry of Information and Broadcasting, Government of India, New Delhi, 1978.

Processes

In the implementation of a development activity or scheme, communication is a process that extends itself beyond the confines of an organisational structure and reaches the people just as the scheme does Before any benefits are derived, a scheme only assumed the form of information in the eyes of the people. The scheme presents itself only as promises by officials, stray discussion among potential beneficiaries, and some factual data before people actually avail themselves of it. That is, the scheme *becomes* the communication it has with its public.

Within the agency administering development, communication is both a spontaneous organizational process as well as a tool of control, coordination, reporting and guidance Whatever the origin of a development activity—state, district or block—it is clear that implementation requires that responsibility for work is passed down the official hierarchy, as also scheme infor-

* Indian Satellite, proposed to be launched in 1981.

mation and other messages. That is, the scheme with all its components is transmitted between levels.

The bringing of a scheme to its people can be viewed as an extension of this process If a scheme is to be introduced in a village. the decision is taken in the form of instructions, clarifications and requests. When the scheme reaches the public it is an extension of the process taking place within the organization Decisions, instructions, clarifications and information culminate here in a final movement from the organization (represented by field officers) to the people

The response of the people can be considered as flowing in the reverse direction. "Upward" flow of messages in an organization as a sequel to the implementation decision. seeking of clarification on points of doubt, discussion, confirmation, reporting on progress, and similar activities can be considered an extension or translation of the people's response to the scheme

Both forward and feedback processes occur simultaneously and at all times—they have only been mentioned separately for purposes of understanding

Levels of Communication Several stages and manifestations of communication can be seen in society Each of the processes of public communication (interpersonal, group and mass) has application, and can be translated into a technique by the staff of development agencies. An extension worker trying to persuade a farmer to adopt a high-yielding variety rather than continue cultivating the traditional inferior strain is a partner in interpersonal communication. Members of a cooperative society and an extension officer discussing rules for loans are engaged in group communication A radio announcement about an imminent storm is an example of mass communication

Communication is a great deal more complex than the mechanistic transfer—or even exchange—of information A host of underlying factors govern the nature of communication, its development and subsequent effect. The assumptions on which a message is based, the intention of the source. the overt and covert components of message. the adequacy of channel, the prior relationship among the participants, the development programme being served, the surrounding milieu and several other factors act as determinants.

Prerequisites for Success

These factors — or determinants — of communication must be weighed by planners before a communication programme is launched in support of a development programme. They act as prerequisites for success of the efforts and reveal themselves as being of two kinds—those that stem

from the communication process and those that do not The former, or 'communication factors', lie in one or more of the elements in the process of communication and act as inputs to the performance of the programme. 'Non-communication' factors are those external to the communication process but very much determinants of its effect and effectiveness. These non-communication factors lie in society, in the surround of media and messages, and form the context within which communication must work.

Communication planners—be they in poster design or radio administration, promoting agriculture or national savings—are normally concerned with the first category. This is a tradition built up by communication agencies, and surprisingly by development agencies using their own media support. Some questions that decide communication decisions are "What size shold the figures in this poster be, and what size the text?" or "What percentage of the year's programmes should be devoted to health, and what percentage to farming?" or "How flexible is this folk performance—can it carry the required amount of information?". Rarely do planners ask "Is the public ready for such a message?" or "Does the government have the machinery required to make this promise a reality?" or "What are the positive and negative consequences of this communication effort if it succeds?"

Against this perspective, success in both categories of factors seems to need an integration of communication with development efforts. Indeed, communication can be best understood as an instrument of development when it is actually part of an ongoing activity. Isolation between the two implies a waste of a national resource. The ideal of integration is based on a coordinated effort by development and communication organisations, whose staff are aware of the implications, potential and limitations of communication.

However, much of the Indian experience in communication has shown neither awareness of communication nor integration in its efforts. Except for a few noteworthy cases, the combination of factors has always left communication as a fragmented or irrelevant effort This drawback has continued to exist despite the recognition that public education has been accorded in various plan documents

Another aspect of organisational arrangement which work as a factor in determining communication effectiveness is follow-up for communication. A communication programme can impart information or mobilize people. Their utilisation of information is a function of the follow-up activities conducted to ensure success of communication.

Communication Factors. Communication effectiveness is also determined by communication factors referred to earlier—the actual planning of content and form of messages, with scheduling duration and frequency of messages, with support activities, which audience, with source, with the complementary

role of a communication programme in a development effort When a communication effort is being planned it is not enough to consider what is being said or how, it is also necessary to consider who will receive it—the "right" people or "wrong"? This decision is necessarily based on various kinds of data, and underlines the importance of the audience in a communication programme, A successful example may be sought from a recent medium irrigation project in an arid district of Andhra Pradesh, where handbills were distributed offering incentives for the cultivation of irrigable dry crops Most of the potential beneficiaries were known to be the elite, with the accompanying characteristics of education and familiarity with the print medium Handbills here were the "right" medium for the target audience In other words, the medium chosen reached the "right" people

An important prerequisite to effective communication is balanced planning/scheduling of efforts For example. the Farm and Home Unit of a station of All India Radio broadcasts an area-by-area account of agriculture and a district newsletter through a cycle of several days rather than a daily, border-to-border programme of general (and useless) content This serves to make optimum use of existing time, facilities, and other resources The audience is segmented by area, consequently by agricultural interest, and a valuable resource (in this case, radio time) is allocated among segments The totality of the effort indicates a balance between resource and need

Each area has its own version of development and its own mix of schemes It is within this area-wise framework that specific subjects need to be planned for communication effort, such as abolition of bonded labour in a predominantly feudal district, the value of irrigable dry crops over irrigated crops in a newly-fertile area, or the profits of poultry in an area responsible to non-agricultural occupation

This immediately raises the issue of a harmony between the subject and the area or people it is meant for Understanding can only be generated if the content of the programme is specific within subject and local to an area.

It is necessary here to distinguish between two kinds of communication programmes in such a development context One publicizes schemes regardless of whether the audience are benefieiaries or not—this is more in the nature of propaganda and need not adhere to the conditions just described of being subject-specific or area-local. The other kind is education as initially conceived in this paper. This is planned for a certain target group, has specific objectives (to make people aware, to explain incentives, to mobilize them to vote) is subject-specific and area-local, reaches the target people through their medium and incorporates their viewpoint

The second kind of communication programme is close to being an ideal one in terms of its communication factors—however, several conditions

need to be satisfied Some of these conditions are inherent in the message. For example, Extension and Village Development Officers were asked to call for applications for a minor irrigation scheme under the Drought-prone Area Programme in a district of Andhra Pradesh. This call went out long before the concerned bank was ready to release loans; the information and publicity were wrongly timed. Another instance of unplanned communication is the screening of films on the Japanese Method of Paddy Cultivation in an agricultural situation which has long renounced this method ... the effort is, therefore, irrelevant to current reality.

It emerges then, that in addition to specificity and localisation, qualities of technique, relevance, comprehensiveness and usability are very pertinent to communication effectiveness.

One often-neglected aspect of communication is the method it employs. The form of message—medium, language, manner and so on—is seen to influence message effectiveness. An educational paper using the standard, near-classical Telugu of writing was found inappropriate for semi-literate readers from a block in Northern Andhra Pradesh.[47] These people speak an "earthy" Telugu compared with the southern dialect of the state. The latter's spoken Telugu is closer to the standard written form, and the paper in question may have found greater acceptance among these people, from the point of view of language.

The manner in which a message is put across is often considered as "packaging" for the message and, therefore, relegated to secondary position as a factor affecting response. This notion is false. Response is seen to be determined as much by form as by content, as revealed by the example of the educational paper [48] Very often, the meaning of a message is lost because the medium, or its use, is wrong for the purpose. The Committee on Information and Broadcasting Media noted, "Posters produced by the Directorate of Advertising and Visual Publicity do not hold attention as the language is not suitable and they do not take account of the special requirements of the different regions. A visual appeal can only be effective if it has colour and an identifiable local image" [49] The form of a message, then, becomes part of it.

Non-Communication Factors. Rather than affect communication from the inside, contextual or non-communication factors influence and mould it from directions of society, the economy, prevalent political system, technology, government policy, and so on.

Sometimes non-communication factors become more powerful than communication factors in determining success of an effort at development communication It has been pointed out that across developing countries, wherever media have been used to effect, these factors of context have played a more prominent role and contributed more to success.[50] Whether

communication factors are more or less important than non-communication ones is open to debate. but certainly the former cannot get underway till the latter sanction it

In Delhi. heads of schools equipped with television met in 1973 to discuss the educational medium. Seven observations were made with regard to drawbacks .[51] interestingly. all these related to planning. organization maintenance and support rather than quality of programmes Though this is not a rural example, it still serves to illustrate the importance of such factors If this is true in a privileged. urban system. then how much greater is the necessity for organization and support in rural communication ?

The existing consciousness of the situation where media act as tools of intervention, existing norms. and so on are greatly related to acceptance of messages A SITE programme showing distribution of land (ownership) deeds resulted in an increased number of landless poor submitting petitions at the Medak district collectorate in Andhra Pradesh Programmes also generated a great deal of excitement over abolition of bonded labour and the minimum wage for farm labour. Even landlords complained that television had created a "wrong" kind of consciousness,[52] *i.e.*, detrimental to landlord interests This could only have happened in a situation where land was already distributed or where people were aware of it and saw themselves as participants

The cultural norms and experience of society are also to be considered in planning a communication campaign. and explain why results are sometimes slow Some of the initial resistance to the idea of family planning could be traced to the belief that children are a gift of the Gods. Resistance is also attributable to the fact that infant mortality is high and every survivor is an extra pair of hands for work—a fact that no motivation drive can alter

This speaks again of the need to achieve a unity where little exists—between communication and development It must be realised that planned communication fits into national or regional policy. not just of communication but of other sectors as well. For example. statements of the government about the rural and educational focus of television are in total contradiction of the goals set by the Electronics Commission with regard to the number of receiver sets The Commission decides the growth of the electronics industry and the target number of television sets to be produced. It has distributed the production of sets among several units, many small-scale. The cost of manufacturing each set is extremely high The private manufacturers hard-sell these sets to the urban upper and middle classes Together, these manufacturers and audience constitute a formidable pressure group and begin to corner all programmes

Rather than help bring about social and economic change which is affirmed as television's prime objective, the medium begins to entertain a class, which as a book on the subject says "can and should pay for its own entertainment"—all at tremendous public cost[63] In such a context of massive manufacture of sets and import of their components. educational media cannot help die a steady death, and leave urbanization, commercialization and pollution of media at their zenith.

If an extension or village development officer is expected to spend time on educating the people on crop technology, an imposition of a heavy target for a seeds exchange programme will negate the educational effort

In the first place, there exists no well-thought national communication policy as does for wages, prices and so on. Where there is a token statement in policy documents, it is either negated in practice or so practised as to make light of a serious objective. For instance, if the Five-year Plan of the Ministry of Information and Broadcasting stipulates that its efforts shall aim to remove social ills, each of its constituent units provide, at the end of each year, a statement on the percentage of time/space/funds allotted to the subject, and the matter is often closed. In this context there is no substitute for involvement of media staff in the themes they are dealing with, commitment to a cause, and consequent quality of output

Policy and the communication situation in the country are also determined by the technology available in the region or country. In most primary schools, the only technology available is a stick of chalk and a blackboard. Discussions on audiovisual media for formal education became meaningless in such a context. Yet, technology must be adopted and adapted as far as possible to existing conditions. If a village is not electrified, visiting film vans and community radio or television sets have to be battery-powered. This requires a high-order of maintenance, which, if lacking, nullifies the advantage of technology.

Facilities for preparing material also deserve mention here While there is some equipment available to development workers to hold slide shows and so on, the accompanying materials are often unusable. Much equipment and material are gifted, and the latter (such as slides and charts) showing non-local situations are often useless.[64] The development agencies often do not have access to suitable materials, and so the equipment lies unused. Getting materials made is expensive, and the technical facilities are not always immediately available.

Cost is a very important factor here. The more expensive a medium becomes, the greater must be the effort to find a cheaper alternative. The organization involved will have to find its own balance.

Economy and political system are also seen to influence the effectiveness of communication in a country. Creating a demand for a better deal is easier said than done. and easier done than undone. If the minimum wage for labour is publicised, then the economy should provide for alternative employment which can make satisfying the demand possible. If supporting factors in the economy do not exist, then educating people on their rights and on benefits from government may misfire This is not to suggest that no item of information should be passed on to people — merely that all consequences and supporting inputs be considered.

In addition. a state or country run by one class of people will never tolerate communication in favour of another class it perceives as detrimental to its interests Landed gentry in the ruling party will try their best to prevent messages about social exploitation reaching the people. In this light, it can be argued that all media—interpersonal and mass—serve those in power as tools for subjugation of the people rather than for their expression and progress.

The situation of those in power suppressing devetopment information pertains to potentially explosive or dangerous themes health, sanitation, etc. are not generally perceived as detrimental to class interests of those in power.

An interesting point of view here is that in many developing countries, nutrition programmes and their education may not receive much support because nutrition is not politically important.[55] This is applicable to other non-politically important areas of development as well.

On the other hand. a programme with political backing is likely to receive the fullest support, whatever the rationale of the programme . .one example is the intense sterilization drive carried out across India, particularly in the Northern states, during 1975–77, when the family planning programme received unconditional political support.

Apart from policy. economy and such all-encompassing factors. the access that people have to communication governs their participation in it, and its utility to them A communication programme has to be administered through media—personal or impersonal, traditional, or modern. These media are to convey messages—a task which necessitates media accessibility to people for whom messages are meant Very often, access to media does not guarantee use of developmental information. However, it is true that in the case of mass media which are generally available to the rich, users also have the education, knowledge and experience to put media information to good use [56] It is quite clear that information is only one among many resources.

Access is determined by three sub-factors. One is the reach of the medium, or the area of physical coverage The second is distribution of media, and the third, audience segmentation by interest.

Each medium has a "reach" peculiar to itself Mass media have a higher reach because of the advantage that technology gives them. A wall-painting is almost permanent and overcomes the "fleetingness" of interpersonal discussion or television, film or radio However, the more "mass" a medium becomes, the less chances there are of simultaneous feedback and immediate modification/clarification of the message.

Poor distribution or diffusion can defeat any advantage of reach or feedback that media may have. Most mass media and quite a lot of interpersonal efforts are not available to the majority of people, putting them out of reach of all messages In addition, people in rural areas have less access to media than the national average because of media's urban origin and consequent growth. As mentioned earlier, less than 15 per cent of radio licences are issued in rural areas (an average of one set for 164 people against the national average of one set for 31 people) and a survey has revealed that media exposure in rural areas is one-fifth that in urban areas.[57] The urban-rural mass media exposure, seen against the urban: rural population ratio, reveals a tremendous imbalance. Viewed against the tendency of "haves" to corner what little media are available, the thin spread over the poor majority is further reduced.

However, communication programmes are to work within this lopsidedness Some remedy to this problem of imbalance in mass communication exists in the shape of community radio sets placed in a public building such as the panchayat office or veterinary livestock unit The entry of television in some villages of the country has made mass communication a little more "mass" as it is not only publicly accessible but also telecasts at a time when most people are free from work.

Such media that are publicly accessible defeat the monopoly of the "haves" over media. The reach is not confined to an individual or family per receiver set, but extends to the entire village.

However, even this is limited. Terrestial rural television is confined to less than 5,000 villages in the country. The spread of portable transistors and radio's traditional lack of utility has resulted in the public radio set being ignored. Even the number of these radio sets is low (Table 7) and many of these are in a state of disrepair.

The Song and Drama Divisions and the Field Publicity Offices of the central government and the state governments' wings or departments of information exist at state level The problem of "reach" is more dominant with these organizations than with those of electronic media or extension networks. For exemple, as mentioned earlier, one estimate has it that if a Field Publicity Unit exhibits a film in a village a day, the country's villages will be covered only once in three years at best Going by the Ministry of Information and Broadcasting's annual report for 1978–79,

Table 7 : Number of Broadcast Receiver Licences (Radio) as on 31st December 1976*

Name of the Circle	Domestic	Concessional				Urban	Rural	Low cost	Posession		Demon-tration	Total
		Cheap	Community	School	Hospital				Dealer	Non-Dealer		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Andhra Pradesh	9,34,705	3,32,267	2,440	1,896	356	7,315	1 889	767	2,764	273	434	12,85,106
Bihar	4,97,149	1,00,077	910	854	96	2,732	888	310	1,764	68	350	6,05,198
Delhi	3,96,183	2,21,632	—	178	23	8,039	6	1,359	3,165	76	179	6,30,840
Gujarat	11,76,344	2,71,974	3,489	1,338	75	11,844	2,384	2,934	3,798	145	208	14,73,533
Jammu & Kashmir	85,846	58,043	1,011	51	12	1,015	—	—	609	6	125	1,46,718
Kerala	8,19,852	70,703	2,775	1,770	161	5,211	7,587	121	2,329	155	204	9,10,868
Karnataka	14,51,218	1,77,064	5,920	2,434	362	15,095	3,411	762	3,848	515	383	16,61,012
Maharashtra	22,08,533	1,63,277	8,755	2,531	54	17,270	3,822	621	5,514	626	431	24,11,434
Madhya Pradesh	6,98,492	1,21,491	3,073	605	132	5,897	911	780	2,256	138	572	8,34,347
North Eastern	1,95,945	13,451	3,720	218	24	1,171	276	6	702	37	198	2,15,748
North Western	8,71,727	6,77,825	509	869	161	7,806	3,125	8,669	4,735	217	772	15,76,615
Orissa	1 75,421	26,451	445	233	28	1,179	—	—	506	29	146	2,04,438
Rajasthan	4,77,244	1,30,827	324	1,340	119	6,975	2,351	2,513	2,486	137	439	6,24,755
Tamil Nadu	16,04,035	1,86,424	16,460	8,797	172	14,496	3,609	322	5,420	827	669	17,91,231
Uttar Pradesh	10,11,455	4,28,970	3,509	1,083	77	10,259	1,828	4,214	6,285	425	280	14,68,385
West Bengal	8,09,285	6,04,791	1,419	455	79	4,557	1,747	830	4,145	95	182	14,27,585
Army Postal Service	85,702	5,366	—	—	—	413	—	—	416	—	—	91,897
Total	1,34,99,336	35,39,633	54,759	24,652	1,931	1,21,274	33,834	24,208	50,742	3 769	5,572	1,73,59,710

* Source *India A Reference Annual 1977–78*, Research and Reference Division, Ministry of Information & Broadcasting, Government of India, New Delhi, 1978.

which states that 63 million people have been "reached" during 1978, the country can only be covered in 10 years, if the population does not rise! This is a problem of equipment, vehicles, and films The Song and Drama Division fares no better, moving an entire troupe over several thousand villages in a state means that a village can be revisited only after several years The states' departments of information have representatives at every district, and some have officers at every taluk—inadequate transport, poor equipment, and outdated or useless films make part of their effort meaningless

Reach, then, seems to be a problem defeating all attempts at scheme education Reach of the organised communication organizations, that is. There are several other means, such as the field official of the development organization and the area's own communication pattern, aided by the traditional village crier or similar channel.

The concept of information reach or people's access to information is not confined to mass media. Extension or Village Development Officers are allotted zones or circles Their distribution among the populace is seen to be imbalanced, in spite of the existence of a large segment which needs information and guidance. Some people do not have access to the official because he or she seeks out another segment. In a recent study, 77 per cent of upper class farmers claimed to have talked to the village-level worker when they saw him last. as against 51 per cent of the lower stata [58] In such a case, distribution of the communication medium defeats access, rather than physical coverage.

Apart from physical coverage and distribution, access is determined by the audience segment and nature of subject as well A part of the audience watching a 16mm film show has been known to get up and leave when a topic did not interest it Here, adequate coverage and distribution have been negated by a topic not of interest to all groups

An evaluation of radio-listening habits among farmers revealed that their preference was for farm broadcasts, news, and film music, in that order [59] Thus, a natural selection and affinity to relevant communication are seen to express themselves People are naturally interested foremost in their livelihood—agriculture, animal husbandry and other themes for communication, with a direct economic bearing, were identified as being important to rural audiences.[60]

Audience is naturally segmented on the basis of occupation, class, and interest group this last segmentation is the final determinant of the reach of communication

Organizational Linkages and Integration

Very often, the communication within an organization—be it the vertical departmental line of hierarchy or the lateral peer group—is in-

dicative of the organizational culture and reflects in its handling of a scheme. It stands to reason that if messages are distorted within an organization, they are likely to be so between it and the public. If conditions such as attitudes, organizational bottlenecks, skill and knowledge are not favourable, message distortion is likely to occur.[61] The content, usability, relevance and comprehensiveness of information which the field functionary passes on to the public depend to a great extent on the messages about the scheme which he or she receives from superiors at block or district level.

The spread of messages through official extension staff is obviously limited. An extension or other officer can meet only so many people at a time Of course, the existing interpersonal communication network of a village which transmits gossip and politically-charged news with incredible speed can aid extension efforts, but this is understandably more difficult with regard to complex, and sometimes technical, details of schemes.

Inter-organizational Coordination Communicating with the people is a gigantic task by itself. No development organization or department can rely solely on its official machinery to achieve it.

Other organizations involved are also instruments to be used for the purpose. In, for example, the implementation of a poultry scheme, under the Small Farmers Development Agency (SFDA), a host of organizations was made responsible for the job. The SFDA subsidized loans, the relevant lead bank advanced them, the Animal Husbandry Department bought chicks and the Poultry Development Corporation supplied feed. Each was responsible for the implementation of a task which included explaining to people and assessing popular response Each organization was thus made responsible for communicating with the public.

This does not mean that fragmented attempts at "dialogue" can be made by each agency involved in a development programme, but that the field officers share the task

This necessitates understanding among the concerned agencies before the extension of the inter-organizational process is seen between them and the public or potential beneficiaries. In this context, schem-public communication can be said to be a function of inter-organizational communication and coordination.

Integrating Media in Development Communication. A vital input for a communication programme is the distance or closeness between it and the development programme it promotes. This highlights the role of communication as a component in development schemes, and visualizes the integration of two or more essentially isolated organizations.

An example may be sought from mass communication organizations. They were conceived and set up in isolation, as were development organizations. Therefore, both began and continued to work in isolation. Any

existing linkage was a result of later efforts spurred by conditions of urgency. Understandably, these have been narrow and sporadic, such as the proliferation of Farm and Home Units since their inception in radio, the creation of a Song and Drama Division as well as the various Field Publicity Units, and the attempts of the Films Division to publicize the objectives of the Five-year Plans.

Strangely, a strong need rarely seems to have been felt to use communication agencies as a support or service for development. or to use development agencies to follow up communication. If such a need was felt and expressed, it remained at policy level and rarely, except again for a few notable exceptions, percolated to the level of implementation One document expressing such need noted that television should be integrated with efforts for Community Development in various ministries.[62] Substitution of "all interpersonal and mass media" for "television" and "rural" for "Community" reads like an ideal directive. Howerer, all linkages, despite their frailty,have been worthwhile attempts at juxtaposing organizations and processes for mutual benefit and realization of shared objectives

The objectives and quality of linkage determine its success The understanding of a communication programme by both its own personnel and those of development organizations is important here. If it is viewed as an effort to inform, motivate and educate, to transmit ideas, meaning and attitudes forward and back, and as an instrument of dialogue, then both organizations may achieve coordination. This concept of communication recognizes that a communication component can do no more and no less It is then for development planners to identify their points of public contact and their communication needs. Only then can communication achieve something meaningful *in the context of programme.*

Such an understanding of communication as a resource, based on identification of communication needs, results in a successful linkage

The Indian Space Research Organisation's (ISRO) television programming efforts at Pij are a worthy example of successful likage, integration, and dialogue Television programmes in Pij have dealt with specific local problems. Television has stepped in just where it should, and assumed the twin roles of a channel for public expression as well as a platform for public information and guidance. It has brought officials to people and people to officials It has championed causes, mobilized participation, conducted follow-up activities, and contributed to the solution of problems by elevating tension to the level of dialogue [63]

Though such instances have been the exception rather than the rule, they have always yielded dividends An examination of the background of these media programmes reveals that certain common factors have contributed to their success. The successful media efforts have always been

well planned and executed with regard to communication as well as non-communication factors. A great deal of planning went into the Poona RRF project in terms of scheduling broadcasts, organizing listener groups and actually producing programmes. An equal amount of care was taken in selecting the topics to be covered by the series, choosing formats, and in mobilizing officials to work for RRF success. It was novel and received full support

Similarly, the Union Bank of India has used media for a specific objective—that of promoting savings with its branches among rural people. It chose to use puppets which it thought would appeal to its target group—the people of rural Madhya Pradesh.

The Status of Communication

The variety of development programmes suggest a need for scheme-public communication and utilization of media. The variety of media available suggest the existence of such communication and utilization. The paradox earlier pointed out has been that isolation rather than integration, is the norm. The lack of coordination is seen among communication agencies as well as between them and development agencies.

Most personnel in charge of development programmes are unaware of communication as a separate function. While there is an insistence among many that great potential and need exist to make contact with the public, they do not see it as an activity calling for special skills or planning. A contradictory, though common, opinion is that growing public consciousness has eliminated the need for making information available to people. Where development staff have made their own efforts, their technical competence has often overridden their communication competence.

Media personnel, for their part, are expected to keep in touch with development departments as a routine activity. Extension workers are a unique blend of media and development administration, so the question of integration is not as pertinent to them. However, other media agencies — such as mass media — are little used. Radio is over 50 years old, television is 20, Films Division 30, Field Publicity 26 and so on. All the agencies under the central Ministry of Information and Broadcasting and state information departments, and communication wings of various other central ministries and state departments, are pretty well established. Yet, their effective use for development is low.

Perhaps the one big national attempt to use media was with the advent of SITE when all departments were involved. Several ministries created separate cells to look after their input, and in some places — as in Karnataka state — an officer was allotted the full-time job of coordinator at the Secretariat Apart from this, development personnel have rarely looked

at media as a tool in their extension efforts. (This neglect or indifference of course, excludes extension workers, who are part of the development agency and exist for the purpose). On the other hand, they have regarded media organizations as "other" purposeless agencies. Typical of this is the answer of a state government officer questioned about coordinating with media "We have nothing to do with radio or television because they are central programmes".[64] While this statement may hold good only for electronic media, it is indicative of a general attitude

Communication does not enjoy high awareness, let alone status, among development personnel at block, district, state and centre. It is not generally planned as an activity at any level, and what little information percolates to the public often does so in spite of the organizations' and media's indifference

Each means of communication has a unique potential and limitation in terms of reach, expense and ability. What could be planned is an optimum mix of existing media within available resources and the harnessing of other media which do not have to be paid for.

In addition to original constricting factors, communication organizations are further impeded by the entry of bureaucracy, as in other government agencies. Inflexibility and cumbersome procedures have inhibited their effective functioning,[65] consequently of their output, and ultimately of public education.

One point of view is that experiences suggest the need for a separate and specific communication strategy at each of different stages of development [66] In such a situation, communication needs to be even more planned to tie in with the existing level of society and its growth.

Communication as it obtains in rural development in India is virtually non-existent as a separate function. It occurs spontaneously as part of the process of transformation of a scheme from policy to action. Apart from this, planned or deliberate communication efforts are rare.

A Summing up

Rural development communication is a responsibility shared by a complex of agencies. Their efforts are decided by the quality of their work as well as by the surrounding support it receives. The output is assimilated by an audience which further decides on that part of communication output to be actually assimilated. A great selectiveness is seen to operate in even the retention and onward transmission of information[67]— a fact which urges greater thinking on best ways of evolving a message. An appropriate combination of communication media can make people apply knowledge as well, and motivate them to seek more information.[68] Effec-

tiveness of media is known, and the need for planned coordinated communication is often emphasized.

What is often seen to be lacking is support on the ground and in action. The best of communication efforts cannot make up for lack of infrastructure or facilities. Over 40 per cent of radio listeners from two districts complained in late 1974 that radio broadcasts are not suitably followed by departments and agencies with supply of inputs such as fertilizers, pesticides, etc. They were also unhappy with the lack of coordination between radio and departments of agriculture, irrigation, etc.[63] Not surprisingly, radio efforts are laid waste if canal water for irrigation is not released in time.

This is not to suggest that planned communication has had no part to play in national development. Obviously it has, in several fields. However, successes have been the exception. Perhaps several crores of rupees wasted on futile projects could have been saved by attempts to communicate. If linkages had been established among communication agencies and between them and development organizations, it is possible that people could have been mobilized to participate in several projects, whose very success hinged on popular response.

While communication can be said to have contributed towards several isolated instances of development, it has also remained aloof from most of the common mix of schemes and programmes. The poverty of the situation is seen strikingly when functionaries and extension workers are unaware of a scheme or programme.

An evaluation of the Drought-prone Areas Programme (DPAP) in a district revealed that not one of 19 extension officers and village-level workers from three blocks was aware of the totality of DPAP objectives Local investigations showed that sarpanchas and panchayat members were not only ignorant about DPAP, but also about the role of panchayats in the programme

There can be no greater indictment of the status of communication within development organizations. In this particular instance, it may be reasonable to assume that the extent of unawareness of DPAP among the general public is related to the situation within the DPAP organization. It is then not farfetched to relate programme success to development communication

If this is true, development has a long way to go in achieving communication with its participants Several gains have been made, but greater consideration and planning for this aspect of work could have added greatly to the positive experiences.

Lessons have been and are being learnt from experiences in many fields. One of the fields with a bearing on all others is development communica-

tion. Its strategy will vary with the purpose, programme and reed. Yet, it is worth bearing in mind a few points

Choosing an appropriate communication strategy for a task must be based on several considerations. The treatment a theme needs, in terms of programming or translating into communication, must be determined by

— The subject

— The area and people covered by the development programme, its purpose; its communication needs

— The specific purpose or the communication programme

— The actual access and affinity of the target people to the media available

— The cost of the communication effort in terms of the possible results

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Section III

PROGRAMMES OF RURAL DEVELOPMENT

LAND REFORMS IN INDIA

P. T. George

Agrarian Structure

Agrarian structure refers to the manner in which man-land relationships are governed. It covers the way in which land is held and cultivated and the rights and privileges enjoyed by the different categories of people who have access to land.

Agrarian structure in India, before Independence, was marked by the presence of feudal intermediaries such as Zamindars, Jagirdars and Inamdars, of various descriptions. They were the result of various tenures created by the state. Extensive areas in the country were under the raiyatwari tenure, where the state was in direct relationship with the occupant of the land. Under this system there existed no intermediaries between the state and the cultivator.

The feudal tenurial system gradually degenerated resulting in insecurity of tenure to the cultivator and enhancement of rent by the feudal intermediaries. In the raiyatwari area also, the occupants of the land, by acquiring more land and getting it cultivated through tenants, created tenancy problems marked by insecurity of tenure and excessive rates of rent. The growth in population and increasing dependence on agriculture aggravated the tenancy problems.

Another important problem that emerged over the time was the inequitable distribution of land In the feudal areas the intermediaries kept extensive areas as home-farm land with tenants under them. In raiyatwari areas also large holdings emerged on account of unchecked acquisition of land. The personal law permitted breaking up of holdings among the heirs resulting in continuous sub-division and fragmentation. Thus, on the eve of Independence agrarian structure had the following major structural problems to be solved *(i)* the feudal tenurial system which had outlived its purpose; *(ii)* inequitable distribution of land; *(iii)* high rates of rent and insecurity of tenures; and, *(iv)* fragmentation and dispersement of holdings.

Land Reform Measures

It is usual practice to study land reform measures in India under the headings abolition of feudal system, tenancy reform, ceiling on land holdings and consolidation of holdings These four aspects are often treated independently. In fact, these are only different dimensions of the problem

In respect of abolition of intermediaries the die was cast as early as in 1940s when it was strongly suggested in the Bengal Famine Enquiry Report that the system had outlived its purpose and the Indian National Congress had already spoken against it in 1928 itself. The intelligent among the intermediaries had already brought about changes in their holdings pattern by 1940s, by recording more land as home-farm land. The first major exercise in the abolition of feudal system was the appointment of the U.P. Zamindari Abolition Committee which favoured raiyatwari type of tenure. Legislative measures were formulated in other states also from the early 1950s to replace the feudal intermediaries by raiyatwari system. In this process *(a)* all the estates were vested in the state with the exemption of home-farms, homesteads, private wells, etc.; *(b)* compensation was paid to the erstwhile landlords and pending the determination of the final sum payable, interim compensation was paid which was adjustable against the final amount of compensation; besides this, there were also provisions for setting the intermediaries' debt. It was reported that the total compensation payable was estimated at about Rs. 670 crores.

The intermediaries had adopted all possible delaying tactics against the abolition laws. The very first amendment to the Constitution was necessitated by the resistance of the feudal landlords to these laws. In many cases they did not cooperate with the administration by making available the records and other materials to facilitate implementation of these legislative measures.

What followed the abolition of the feudal intermediaries? Invariably they were successful in retaining extensive areas of cultivated land under the guise of home-farms. Tenants were removed from home-farms in large numbers so that the land can be legally held by the erstwhile intermediaries. No heads rolled with the abolition of the feudal system in India; on the other hand, they were treated royally, and were permitted to keep for themselves considerable extents of the best land within the estate as their own, they were given huge amounts of money as compensation. Even their debts were settled lest they may be exposed to difficulties once their estates were taken over. In Uttar Pradesh, it was reported that six million acres were held by large zamindars as unlet home-farms.* It is these ex-feudals that now constitute the very powerful 'gentleman farmers' in the erstwhile feudal areas. They have phenomenal economic and social power in the rural areas; their control of the political machinery and through it the economic and developmental policy of the country is so remarkable that they now wield more power than what they did when the British were ruling the country.

* See Daniel Thorner, 'The Agrarian Prospects in India'.

Tenancy Reform Measures

It was noted above that by the degeneration of tenures, tenancy cultivation became universal irrespective of the type of tenure. When the feudal system was abolished care was not taken to settle the land with the actual cultivator. It was only in U. P. that the numerous tenures were broadly regrouped; but still, there were *adhiars* and *adhivasis* with limited rights in land though they were later on upgraded and given firmer rights by enabling them to become Bhumidhars. In the other states, the settlements were effected with one or the other of the various types of intermediaries that had emerged between the zamindar or feudal lord and the actual cultivator. This naturally meant that the actual cultivators who were known by different terms in different states continued to be at the mercy of the newly recognised occupants of the land. This is how tenancy still continued to be a major problem in the erstwhile feudal areas.

The two major problems that surfaced under the tenancy situation are *(i)* a high rate of rent and *(ii)* a high degree of insecurity. Tenancy reform measures have primarily to tackle these problems. But these problems are much more complex than what they would appear to be. So long as the state of disequilibrium in demand for and supply of land exists, there will always be a competition among aspirants for land resulting in high rent. The monopoly element in landownership permits the landowner to charge a monopoly price and not the classical rent from the tenants. This monopoly element and its ability to frustrate measures prescribing reasonable rates of rent is often under-estimated with the result that policy in this regard just remained on paper

It may be recalled that as early as when the First Five-year Plan was being formulated, it was accepted that the reasonable rent should be one-fifth to one-fourth of the gross produce Most of the states had accepted the prescription and incorporated it in their respective laws. Some states, e g., Maharashtra, had gone still further and prescribed even lower rates of rent. However, some states have yet to adopt this limit, for example, in Andhra area of Andhra Pradesh, Tamil Nadu, Haryana and Punjab, higher rates still prevail Apart from the failure of some States to fall in line with the national policy in this respect, it is significant to note that in actual practice the legally prescribed rates were never followed in the rural areas. Several studies have revealed this. In some parts of Andhra Pradesh, the rent was as high as 75 per cent of the gross produce In most parts of the country, where tenancy cultivation is in vogue, the reported rate of rent is 50 : 50. That there is absolutely no agency to effectively supervise the implementation of these provisions, explains the hiatus between the state policy and the actual field situation

Therefore, it can be stated that as far as rates of rent are concerned the state policy is clear and it has been translated into legislative

measure in most of the states; but their implementation has not been effective.

Insecurity of Tenure

Insecurity of tenure, as already pointed out, arises out of socio-economic factors that govern demand for and supply of land. This insecurity arise in three forms : *(i)* termination of tenancy, *(ii)* resumption of land by landowner for personal cultivation; and *(iii)* surrender of land by the tenant. It will be useful to explain these forms of insecurity before discussing what policy was prescribed in the Five-year Plan documents to meet them.

Termination of Tenancy. Tenancy reform measures were first introduced in the feudal areas (for example Bengal) to protect the tenants from the wilful exploitation by the feudal lords.* The Bengal Tenancy Act, 1885 had introduced the concept of protected status to tenants and the provisions of this Act were in some shape or the other adopted in all the provinces and, by the 1920s, protection of tenants against eviction was a widely known concept. The various tenancy laws, as adopted in the various provinces, had laid down certain basic principles for tenancy and its protection. It was an accepted principle that a tenancy could be legitimately terminated if the tenant contravened any of the terms of the lease, failed to pay rent, used the land for non-agricultural purposes, denied the landlord his legitimate rights and on a few other conditions. Such conditions were copied even in legislative measures that were enacted in raiyatwari areas as could be seen in the Bombay Tenancy and Agricultural Lands Act, 1948 and or even the Malabar Tenancy Act, 1930. A close analysis of the accepted grounds for termination of the tenancy measures would reveal that a tenancy can be ended legitimately, on very frivolous grounds. It would be advisable even now to review the provisions in this regard of some of the tenancy laws in the country as even after conferment of ownership on tenants, some tenancy is bound to exist. The objective should be to restrict termination of tenancy only to misuse of land, denial of rent, or denial of the landlord's right. Beyond these, all other grounds that were listed in the various laws should be given up if termination of tenancy is to be reduced. The other policy approaches to reduce termination of tenancy, were to prescribe a fairly long term as the miniumum period of tenancy and automatic renewal of the tenancy agreement on the expiry of the first term of lease. Such suggestions were made in the Plan documents to improve security of tenure by reducing the scope for termination of tenancy.

Resumption for Personal Cultivation. Tenancy reform measures enacted soon after Independence were replete with provisions to permit the land-

* See, P. T. George, *Op. cit.*

owners to resume the land for personal cultivation This provision was very widely utilised by the landlords to get rid of the tenants which resulted in a high degree of insecurity of tenure for the tenants The Planning Commission thought of different solutions to prevent such resumptions merely to get rid of the existing tenants It was thought that if resumptions were to be recorded and registered, the tendency would be curbed. Further, it was suggested that a more rigid definition for the term 'personal cultivation' would be an effective check. For this purpose, 'personal cultivation' should involve personal labour, and not merely personal supervision. It was later on suggested that personal cultivation should also imply that the landowner resided within a specified distance from the location of the land, that would permit such supervision and personal cultivation These would help in restricting the scope for resumption for personal cultivation. We have no indication how far such resumptions were cut down by these prescriptions Most of the states did not incorporate the suggestions made by the Planning Commission At the same time policy-wise changes were taking place which rendered resumption for personal cultivation meaningless and to this we shall refer to later.

Surrender. Where neither termination nor resumption succeeded the strategy used by landowners to get rid of the tenants was to persuade them to surrender the land *voluntarily.* In such cases there was no means to ensure security and a written declaration was adequate proof for the landlord of the voluntary nature of the surrender To counter this villainons way of getting possession of the land, the Planning Commission suggested that surrenders should be registered with the revenue authority and that the authorities should be convinced of the genuineness of the surrender before the landlord could take possession of the land. But this was not effective enough and in the Fourth Plan it was suggested that all surrenders made in the recent past should be treated as surrenders in favour of the state and the landowner should not be allowed to takeover the surrendered land, which the state would be entitled to disposes of according to rules framed for the disposal of government land

If effectivels implemented these suggestions of the Planning Commission would have reduced the degree of insecurity at least marginally But unfortunately, most of the states did not adopt these suggestions by incorporating them in the tenancy laws.

Ending Landlord-Tenant Nexus

While these measures were being defined and laid down it was found necessary that in order to promote security of tenure the best wayout was to do away with the landlord-tenant nexus. In fact, even from the early days of tenancy legislation the right of the tenant to purchase the tenanted land

was recognised. The ultimate step was to convert all tenants into owners of the land they held as tenants. This stage was reached in different phases. In the first phase the principle adopted was known as the right of pre-emption. It means that if at any time the landlord wanted to sell the land leased out to a tenant the latter had the first preference and only when he refuses to purchase it, the landlord could sell the land to anybody else. The effectiveness of this measure to promote purchase by tenants was always suspect. The landlord could easily choose a time to sell the land when the tenant, whose economic condition he knew so well, was least sound to make an offer to purchase the land. For, if he sells to the tenant he may have to be content with a much lower price As this approach failed to help the tenants to become owners to any significant exten, a more effective method had to be introduced.

This led to the right of optional purchase When the tenant felt that he could purchase the leased area he could make an offer to that effect to the landlord who would either accept the offer or reject it. In case he accepted the offer the deal is finalised on mutually agreed terms and land is transferred to the tenant On the other hand, if the landlord failed to accept the offer the tenant was entitled to apply to the authorised revenue official who would intervene in the matter and get the land transferred to the tenants at a reasonable price fixed accororing to provisions of the Act Here the initiative rested with the tenants and in the context of dependence of the tenants on the landlords, such initiative was rarely seen. Thus, in the ultimate analysis, even optional right to purchase supported by official machinery failed to effect transfer of much land to the tenants.

The final stage was the compulsory transfer of land to the tenants. Under this scheme, with effect from a notified date, all the tenants who were entitled to purchase the land from their landlords would be deemed to have become owners of the land they cultivated This was done in the former Hyderabad State and in Maharashtra first, and thereafter, in a number of other states This process is now on in Kerala and Karnataka. It is reported that as a result of this measure over three million tenants had become owners of over 3.7 million acres of land in the country.

One advadtage of transferring land to the tenants is that the tenancy problem can be solved to a large extent. If adopted universally, what all would remain are those cases which are permissible—cases of leases by invalids, minors, widowed and other type of landowners who have to be permitted to get their land cultivated through tenants. So, in most of the states where tenants were given ownership, one can find provisions restricting future leases. If this is also universalised there would be no tenancy problem in the future. When leasing is not allowed, it is not proper for village-level officials to record any tenancy that would be existing in the villages. Then the position is very comfor-

table, almost amounting to wishing away the problem of tenancy for the future. This is perhaps the reason why in Madhya Pradesh, Rajasthan, Maharashtra, Uttar Pradesh and Bihar, tenancy, according to 1971 agricultural census, was very negligible. However, the real situation in the rural areas is not revealed by the census which was based on land records. The tenancy practice cannot disappear so long as the scarcity of land in relation to demand persists Another advantage of compulsory tranfer to tenants and prohibition of leasing in future was that the other provisions of tenancy laws needed to be implemented only in respect of the residual tenancy which is limited both in extent and in number. Thus in one stroke the whole tenancy problem disappears.

In real life, however, the rural scene is not that simple and straight Leasing in and leasing out go on under various terms, terms which are particularly unfavourable to the tenants for they are at the receiving end and landlords still enjoy monopoly power. Tenancy assumes the nature of labour agreements, mortgages, share-cropping and a number of other forms without becoming either recorded or admitted by either of the parties. This collusion is for mutual benefit, for the alternative to the landless man is to go without land. Thus, we have a very happy situation without a serious change in the tenurial situation in the rural areas, where nobody speaks of the existence of tenancy or problems arising therefrom The Agricultural Census confirmed that practically tenancy was non-existent at least in most parts of the country All the same, independent observations made by academics estimate that about 20 to 30 per cent of the land in the rural areas is still under tenancy cultivation of one type or the other. In any case, it would be very safe to believe that at least 30 per cent of the land owned by large landholders might be under tenancy cultivation of various types and often on terms not at all favourable to the tenants. Because of the poor maintenance of records, one has no way of finding out the truth. The progress made in the recording of bargadars in West Begal (where several lakhs were recorded in a special operation) further lends credibility to the premise that tenancy is still rampant and is highly exploitative because of the monopoly element in landownership. Thus, we have had changes in the law without having any impact on the agrarian structure for the better.

Ceiling on Landholdings

The question often asked is why there should be ceiling on agricultural holdings when there was no comparable restrictions either on income or on wealth in the other sectors. This discrimination is justified by resorting to the argument that land is a limited factor and, hence, there should be a sort of rationing when the shortage cannot be rectified. It should be recalled, however, that while discussing the policy of ceilings on land-

holdings soon after Independence, sufficient emphasis was placed on comparable restrictions in the other sectors as well. The Kumarappa Committee Report, the First Five-year Plan document and the Report of the Panel on Land Reforms, all contain references to this effect. But later on, only land became susceptible to ceiling and the other sectors were ignored, may be for political reasons as well. In any case one of the major policy approaches should be to link ceiling on landholdings with an integrated income, wealth and wages policy covering the entire economy, if growth with justice is to be ensured.

Ceiling on landholdings is justified on the ground that the ownership in land is to be treated as merely occupancy right and right to use it subject to payment of the stipulated rent or revenue. Under the raiyatwari system, no ownership is given to the raiyat but only the right of occupancy, and it should be within the privileges of the society (state) to regulate this right in the best interests of the maximum number, and this is what has been laid down in the Constitution. So, for socio-economic and constitutional reasons, a ceiling on landholdings is perfectly justified.

Ceiling is also justified on the ground that (a) land is inequitably distributed with a large number going without land; and (b) this inequitable distribution impedes optimal use of all the productive resources. The Agricultural Census 1971 revealed the following landholding pattern (Table 1)

Table 1 : Distribution of Operational Holdings 1971 (Agricultural Census)

Size Group	% of No. of Holdings	% of Total Area
Less than 1 ha	50.6	9.0
1 ha. to 2 ha	19 0	11.9
2 ha. to 4 ha.	15.2	15 5
4 ha. to 10 ha	11.3	29.7
10 ha and above	3 9	30 9

The various N S. S. Rounds showed that the number of landless in the rural areas was anywhere between 10 to 15 per cent of the rural households Thus, the total landless poor accounts for a substantial proportion of the persons dependent on agriculture, while 30.9 per cent of the land is held by 3.9 per cent of the households in the rural area This skewed distribution is not congenial to maxmising production.

It has been found from various farm management studies that a large holding depends more on hired labour. When labour is hired the landowner is keen to equate the marginal cost to marginal product and would stop hiring additional labourers when he finds the marginal cost is higher than marginal product. On the other hand, on smaller farms the family

labour is more fully used as its cost does not enter into the calculations of the small farmer with less than fully employed family labour ; and the per-acre production is relatively higher on the small farm. Thus, if one goes by purely economic considerations there is nothing to lose by cutting down the large holdings as they are not the most efficient units of production nor are they helpful in absorbing maximum labour. In a labour surplus economy, where the opportunity cost is near zero, a fuller utilisation of family labour is ensured on the small farms.

It is also pointed out often that the holdings in India may be large but the farms are small. Under the existing technology, large farms cannot be cultivated efficiently by the landowner himself and it is a common feature that such holdings are parcelled out into smaller units of operation. So, imposing a ceiling on large holdings need not necessarily be the same as breaking up of the most efficient units of production or breaking up of large farms. Economics of scale do not have the same applicability and relevance to agriculture as in industry. Moreover, it needs to be pointed out that under the existing policy framework, a ceiling on landholdings does not necessarily imply a ceiling on income

Early Ceiling Laws

In any case, ceiling on landholdings is decided purely on political considerations. This is amply proved by the first ever experience of ceiling legislation in the country which was enforced in Jammu & Kashmir An arbitrary level of 22¾ acres was fixed as the ceiling with no attempt to classify the land and the surplus land over the ceiling was taken away without paying compensation and over 4 5 lakh acres were freely distributed to the deserving categories of people. All this was done with lightening speed and effect.

In the legislative measures meant for abolition of intermediary system some other states also provided for ceiling However, nowhere else was available the some political expediency that existed in Jammu & Kashmir in those days and this explains the sea of difference in the levels of ceiling. approach and implementation

However, when the First Five-year Plan was launched, the country was not yet sure about the ceiling policy. There were no data available and no accepted policy framework though the Kumarappa Committee's report had dealt with this aspect Therefore, the Planning Commission appointed a Panel on Land Reforms which set up three committees (1956), one to deal with tenancy reform measures, the second to deal with the size of holdings and the third to deal with the problems of reorganization The repons of these committees were submitted in 1958 The Second Plan was on by that time and the policy was not yet formulated The Planning

Commission wanted to go about ceiling in a systematic manner and, hence, called for a census on land holdings throughout the country and this was also initiated during the First Plan period itself. However, the census was watered down into sample studies in some states. All the same, for the first time dependable data on land holdings were made available. Around this time, the N.S.S. organisation conducted the 8th Round in which land-holding data were collected. During the Second Plan period the policy was more effectively formulated and spelt out in the Third Plan document.

Land reforms is a state subject according to the allocation of subjects in the Constitution. The Centre assumed only the role of a guide by formulating the broad policy while it was left to the states to enact legislative measures spelling out the details in accordance with the broad framework on the one hand, and on the other, the socio-political and economic compulsions in each state.

Most of the states had enacted ceiling laws in accordance with the views expressed in the Second and Third Five-year Plans in the early 1960s. The main features of these laws can be briefly discussed following the significant points of law. The level of ceiling was the most important aspect. The usefulness of a ceiling law as an effective instrument for structural change in the distribution of land and as a tool for bringing about greater social justice would depend upon the levels of ceiling accepted in the legislation. The Planning Commission left the level of ceiling to be decided by the man-land problems in the respective states. The result was that the ceiling varied from 15 acres to 324 acres. In Andhra Pradesh, for the lowest quality of land the ceiling was 324 acres.* This wide variation from state to state was not a desirable situation even after making a margin for variations in the agro-climatic situation and man-land ratio. Fixing a high level of ceiling was the major cause for the ineffectiveness of the ceiling laws.

The unit of application is the second factor that would influence the effectiveness of ceiling laws. A ceiling could be applicable to all the land held by all the members of the family as a unit or it can be applied to an individual landholder within the family, in which case there is no need to pool the holdings of the members of the family. The Planning Commission held the view that as the census on agricultural holdings were conducted on the basis of individual holdings and as records were built up on that

* The ceiling ranged in different states as follows: Andhra Pradesh 27 to 324 acres; Pepsu area of Haryana and Punjab 30 to 50 st. acres, (not to exceed 60 to 100 acres); Assam 25 acres, Bihar 20 to 60 acres; Gujarat 19 to 132 acres; Jammu and Kashmir 22¾ acres; Karnataka 27 st acres (27 to 217 acres), Madhya Pradesh 28 to 84 acres; Maharashtra 18 to 126 acres; Manipur 25 st. acres; Orissa 20 to 80 acres; Rajasthan 22 to 336 acres; Tamil Nadu 12 to 60 acres; Tripura 25 st acres; Uttar Pradesh 40 to 80 acres; and West Bengal 25 acres,

basis it would be more practical to keep the individual as the unit of application. Still some states adopted the family as the unit while some laws had the individual as the unit of application. Where family was adopted as the unit, it was a family of five members with additional area for additional members in some states with the outer limit prescribed Such flexibilities further reduced the effectiveness of the ceiling policy by permitting large areas of land being permitted to be held by landholders under one excuse or the other.

Exemptions given to various types of land, from the operations of the ceiling provisions constituted the third major aspect of ceiling laws. Liberal provisions were made in the ceiling laws. Sometimes, the list contained 30 to 40 types of exemptions. The net result of such liberal exemptions was that the ceiling provisions and their effect were further watered down. Exemptions that adversely affected the surplus area were those given to mechanised farms, efficiently managed farms, specialised farms, land held by trusts, cooperative societies and other institutions, etc. The net result of all the exemptions could not be easily estimated.

Compensation payable was fixed in different states at different levels and on different principles, though the sum payable was invariably below the market price. Another feature of the law was the provision made for disposal of surplus land and in this also there was much difference from one state to another. One can find that in states like Gujarat and Maharashtra preference was given to promote cooperative farming on the surplus land by cooperatives formed by landless persons and small holders.

Implementation

At the time of the mid-term evaluation of the Third Plan, the performance of the implementation of land reforms including the ceiling laws was also reviewed and the progress in moping up surplus land and its distribution was found to be unsatisfactory. A Committee of Implementation was appointed in 1964 with the Central Home Minister as it's chairman. This Committee made a number of recommendations; the important one was to create necessary high-level posts in the states to pursue vigorously the implementation of land reform measures In response to this recommendation, a number of states created special posts for this purpose. The Committee of Implementation sent teams to different states and discussed the problems of implementation and suggested solutions As a result, some progress was made which was reported to the Planning Commission periodically By 1976, over 30 lakh acres of land was declared surplus; of this, 24 lakh acres was taken possession of by the states and an extent of 20 lakh acres was distributed among 10 65 lakh beneficiaries (See Appendix I)

Revision of Policy

However, the new technology that was catching up in agriculture and the new political development in the country lent urgency to the question of having more effective ceiling policy. The Chief Ministers met in a Conference in 1969 to thrash out a uniform policy so far as ceiling was concerned. To discuss intensively these aspects the conference referred the whole issue to Central Land Reforms Committee set up in 1969. The Committee submitted its report in 1971. The All India Congress Committee had appointed another committee to discuss the same matter. These resulted in the formulation of national guidelines which were approved by the Chief Ministers in a Conference held in July 1972. These guidelines were sent out to the states on July 23, 1972 with a suggestion that the ceiling laws should be revised in accordance with them—by the end of December 1972. This process of revision however took more time. But by the end of 1974, most of the states had revised the ceiling laws and put them into operation. The main features of the revised ceiling laws are indicated below.

1. *Level of Ceiling.* The ceiling for the best quality of land was to be between 10 and 18 acres; for the second quality of land between 18 and 27 acres; and for the last quality land or dry land between 27 and 54 acres. Slight variations were allowed in respect of drought-prone areas, desert areas and hilly areas.

2. *Unit of Application.* The unit of application was to be the family—a family being defined as father, mother and three minor children. Major sons were allowed a separate ceiling. All the lands of the members of the family were to be pooled and the ceiling applied to land owned or held in any capacity For members over five in the family, one-fifth of the holding was allowed subject to a maximum of twice the ceiling.

3. *Exemptions* Exemptions were reduced to the minimum. Plantations of specified type, lands held by banks, cooperatives, Bhoodan Yagna Committees and state and central governments as well as local bodies were exempted. So were lands held by public trusts, educational and charitable institutions. Most of the exemptions which had a deleterious effect on the emergence of surplus land were deleted.

4. *Implementation of Ceiling Laws.* Implementation of ceiling laws was to be self-financing. Compensation was fixed at a rate taking into account the paying capacity of the beneficiaries, but much below the market price.

5 In the matter of *distribution of surplus land,* preference was given to landless agricultural labour,—particularly those belonging to Scheduled Castes and Scheduled Tribes.

Implementation of the revised ceiling laws is going on. By the end of December, 1978 in the various states 13,48,186 returns were filed by

large landholders in accordance with the provisions of the law. Of this, 12,68,982 cases were disposed of, resulting in 39,78,119 acres being declared surplus. The area taken possession of by the states was only 23,23,462 acres, and out of this, by the end of 1978, only 16,00,713 acres were distributed among 10,78,027 beneficiaries Out of this total number 4,31,600 beneficiaries belonged to Scheduled Castes, 1,36,392 to Scheduled Tribes and 5,10,035 to 'others'. (See Appendix II).

There is a wide gap between the area declared surplus and the area taken over, and a similar gap between the latter and the area distributed. One of the reasons for this situation has been the legal battles that have been initiated by the affected landowners It was reported that out of 16 lakh acres declared surplus in Andhra Pradesh, an extent of 12 lakh acres was subject to court orders of one type or the other resulting in the land not being available for distribution

The net result of the ceiling laws has not been satisfactory Much of the land made available belongs to the poorest quality needing much developmental investment To help in this, a modest scheme was formulated in the Fifth Plan, and over Rs. 12 crores was provided to the beneficiaries for development of the land and for initial cultivation. Half of it was treated as subsidy and half as loan The assistance was only Rs. 200 per annum for land development This was inadequate to meet the requirements but the presumption was that state governments would be able to supplement this by other means However, the scheme for financial assistance to the beneficiaries does not seem to have yielded the expected dividends

In any case, the large landowners have, by and large, circumvented the ceiling laws. Benami transfers were freely resorted to well in advance of the date from which retrospective effect was given to the provisions of the law. Where they had to part with land they invariably parted with land of the poorest quality. It cannot be said that any structural change in the distribution pattern of land had taken place in the country as a result of the ceiling on landholdings Even if some dispersal of holdings has taken place this has happened within the families and among friends and relatives such that no effective redistribution took place

Consolidation of Holdings

Consolidation of holdings is essentially an operation to reorganise the holdings and does not involve the redistributive justice which is the basis of other land reform measures Bringing together scattered pieces of a holding into a compact block facilitates better operation and would result in higher production.

The holdings in India were small and were highly fragmented This was brought to the notice of the government in Bombay Province as early as in 1847. The settlement officers in their report in that year made a

strong case against further fragmentation of the holdings. The Settlement Department decided not to recognise further fragmentation and refused to record such break-ups. They wanted that the land should be inherited by the eldest son and so recorded. This decision had no legal sanction and the civil courts continued to give partition decrees and were able to enforce such partitions on court orders. This frustrated the efforts of the Settlement Departments and they had to yield. Efforts were made sporadically to fix the minimum size of a holding beyond which no partition should be allowed. Such attempts were made in Baroda and Bhopal. However, the first concerted attempt at consolidation of holdings was taken up in 1905 in two villages in Raipur and Bilaspur districts In 1916, an effort was made in Bombay to get a legislation passed for effecting consolidation of holdings, but this had to be given up as it was not considered practical.

Consolidation of holdings through cooperative effort was initiated in Punjab with voluntary participation and provision to withdraw after the initial period of four years' experimentation. This experiment was also tried in Uttar Pradesh. A number of cooperative consolidation societies were formed between 1940 and 1950-51 in Uttar Pradesh, so that by 1951 an extent of 68,678 ha. of land was consolidated through these societies. Between 1920 and 1940, a number of enactments were also passed in some states and provinces to effect consolidation : Baroda (1920), Central Provinces and Berar (1928), Punjab (1936), Uttar Pradesh (1939), and Jammu & Kashmir (1940). The principle adopted was to resort to consolidation if a majority of the landholders agreed to it. Under these enactments an extent of 1.86 lakh hectares of land was consolidated between 1940 and 1947.

After Independence

It was realised that consolidation of holdings cannot progress on the basis of willing cooperation and on consensus. So some element of compulsion was necessary to effect consolidation and the laws enacted subsequently had it. Some new laws came into being and in some cases old laws were replaced : Bombay (1947), Uttar Pradesh and Himachal Pradesh (1953), Punjab (1948), Rajasthan (1954), West Bengal (1955), Andhra Pradesh (1956), Bihar (1956), Madhya Pradesh (1959), Assam (1960) Jammu and Kashmir (1962) and Karnataka (1966).

Though most of the states had laws for promoting consolidation, the pace of implementation varied On the basis of the progress made, the states fall under the following categories . (1) states where substantial progress has been made with a total coverage plan—Uttar Pradesh, Punjab and Haryana ; (2) states where substantial progress was made, but had no plan for total coverage—Maharashtra and Himachal Pradesh ; (3) states where some work has been done—Madhya Pradesh, Rajasthan, Gujarat

and Karnataka; (4) states where only experimental work was taken up—Jammu & Kashmir, Bihar and Andhra Pradesh; (5) states where no progress was made though legislation existed—West Bengal, Assam and Orissa; and (6) states where no legislation exists—Tamil Nadu and Kerala.

The process of consolidation is going on at a slow pace and the country had spent over Rs 80 crores by the end of the Fourth Plan for promoting consolidation of holdings since 1951. It was reported that an extent of 35 mha has already been consolidated since the start of the First Plan

With the existing scarcity of land and personal laws of the communities that inhibit it, consolidation of holdings is a self-negating process and would need to be gone through repeatedly with a specified time interval. Without adequate records to protect the interests of the various types of cultivators, rushing through the consolidation process would result in dispossession of tenants as it happened in Haryana in the recent past.

Conclusion

Now that we have seen the major land reform measures and their working in the past, certain conclusions can be drawn therefrom :

It is difficult to concede the often expressed view that land reform measures had been effective It would be safer to conclude that none of the land reform measures in the country was sufficiently effective to bring about a structural change in the agrarian sector. Abolition of intermediaries was the least effective in this regard.

Of far more significance was the effort to confer ownership on tenants under the tenancy reform measures. This is the only tangible step of some significance so far but its effectiveness is confined only to a few states Ceiling on landholdings could at best be compared with Vinoba Bhave's Bhoodan movement and nothing more, considering the way the ceiling laws are being implemented in the country It would be foolhardy to expect any structural change as a consequence of implementing these laws.

But land reform measures still remain the only means by which redistributive justice can be afforded to the landless and the poor in the rural areas. Only a radical land redistribution would generate and sustain the income in a large number of poor families Their demand for consumption goods would promote production of goods calling for more investment and leading to higher labour absorption in sectors that produce these goods. Initially the upward moving spiral has to be set into motion by a radical redistribution of land, but this is not acceptable to the present political power structure It is these forces that have vitiated the policy, watered down the legislation and diluted and impeded the implementation of the various land reform measures

Appendix I

SURPLUS LAND DISTRIBUTED UNDER THE OLD CEILING LAWS

(As collated on 30.8.1976)

(Area in Acres)

State	Area declared surplus	Area taken possession of	Area distributed	Total	Number of Beneficiaries		
					Scheduled Castes	Scheduled Tribes	Others
1	2	3	4	5	6	7	8
1. Anhhra Pradesh	25,792	25,792	875	N. A.	N. A.	N A.	N.A.
2 Assam	1,71,871	1,71,871	79,951•	61,519	4,044	4,859	52,618
3. Bihar	8,956	N. A	1,100	N A	N.A	N A.	N,A.
4 Gujarat	51,372	43,723	41,787	14,177	1,279	9,752	3,075•1
5 Haryana	1,50,043	6,260•2@	99,043	31,676	7,198	N A.	24,478
6. Himachal Pradesh	6,525@	292@	292@	917	N.A.	N.A.	N.A.
7. Jammu & Kashmir	4,50,000	4,50,000	4,50,000	N.A.	N A·	N A.	N A.
8. Madhya Pradesh	97,273	56,679	31,618	5,190	1,006	1,617	2,367
9. Maharashtra	3,41,489	2,39,569	2,39,569•3	17,000•3	N.A.	N A.	N.A.
10 Punjab	1,74,112@	97,475@	74,200@	25,000•4	N·A.	N A.	N.A.
11 Rajasthan	3,35,721	2,60,582	1,70,801	11,431•8	3,579	1,470	6,382
12 Tamil Nadu	69,202	52,724	44,488	26,670	N.A·	N.A.	N.A.
13. Uttar Pradesh	2,15,466	2,04,119	1,73,548	55,504	—31,240—		24,264
14. West Bengal	9,63,305	8,26,783	5,66,417	8,16,437•5	2,86,391	1.75,844	3,54,202
15. Delhi	286	260	101	102	N.A.	N.A.	N A.
	28,80,776 +1,80,637 St. acres	23,32,102 +1,04,027 St. acres	18,99,298 + 74,492 St. acres	10,65,623	3,03,623	1,93,542	4,67,386
					—+31,240—		

@St acres

Notes : 1. *N. A.* means not available

2. From most States the data regarding the number of beneficiaries and its break-up into Scheduled Castes and Scheduled Tribes and others are not complete. Therefore the actual number of beneficiaries cannot be ascertained.

* The data are incomplete with reference to their respective immediate variables

*1 Plus 71 cases of distribution of Eksali basis.

*2 Under the Punjab Act, the area declared surplus is allowed to be retained by the landowner, the land being available to the appropriate authorities for utilisation under the scheme prepared. In the Pepsu Act, there was provision for taking over of area declared surplus. This figure relates to area so taken over in former Pepsu area.

*3. The area distributed includes land given to the Maharashtra Sugarcane Farm Corporation and given to Cooperative Societies. The number of beneficiaries is only an approximation. Details not available.

*4. The number of beneficiaries is only approximation and break-up is not available

*5. The number of beneficiaries and its break-up include allotees of land under the revised ceiling law.

*6 The beneficiaries under Scheduled Castes and Scheduled Tribes are not available separately for Uttar Pradesh. The total under these two Columns (in columns 7 and 8) is indicated here.

Source · Ministry of Agriculture and Irrigation, Government of India, New Delhi

Appendix II

STATEMENT SHOWING PROGRESS IN THE IMPLEMENTATION OF THE CEILING ON LAND REFLECTING THE NATIONAL GUIDELINES

(Prepared on 22 2 1979 for the month ending December, 1978)

State/Union Territories	No. of Returns Filed			Progress of Scrutiny		
	Voluntary	On Official Initiative	Total	No. of cases disposed of	No of cases pending	As on
1	2	3	4	5	6	7
Andhra Pradesh	4,14,914	28,899	4,43,813	4,42,540	1,273	31.12.78
Assam	10,933	10,466	21,399	21,106	293	*2 & *3
Bihar	2,252	50,803	53,055	43,598	9,457	31.10 78
Gujarat	48,058	8,115	56,173	56,173	Nil	31.12.78
Haryana	23,765	—	23,765	1,18,232	5,533	31.12.78
Hiamchal Pradesh	1,573	1,117	2,690	2,686	4	30. 9.78
Jammu & Kashmir*5	—	—	—	—	—	—
Karnataka	91,196	54,398	1,45,594	72,619	72,975	31.12.78
Kerala	40,065	21,786	61,851	56,592	5,259	31 12.78
Madhya Pradesh	2,29,110	—	2,29,110	2,25,399	3,711	30.11.78
Maharashtra	87,692	4,566	92,258	98,402	1,856	31.10.78
Manipur	28	151	179	111	68	31.12 78
Orissa	7,232	40,620	47,852	37,858	9,994	30.11.78
Punjab	34,554	2,274	36,828	36,291	537	31. 3.78
Rajasthan	5,548	39,221	44,769	43,615	1,154	30 11.78
Tamil Nadu	191	18,551	18,742	15,783	2,959	31.12.78
Tripura	785	1,853	2,638	2,638	Nil	31.12 78
Uttar Pradesh	950	62,786	63,736	61,815	1,921	31.12.78
West Bengal	47,995	3,499	51,494	39,916	11,578	30. 6.78
Dadra & Nagar Haveli	—	350	350	336	14	31.12 78
Delhi	1,435	146	1,581	1,069	512	31. 1.78
Pondicherry	24	285	309	203	106	31 12.78
Total	10,48,300	3,49,886	13,98,186	12,68,982	1,2[illegible],204	

Appendix II—(Contd.)

States/Union Territories	Area estimated to be surplus	Area declared surplus	Area taken possession	Area Distributed: Area	Area Distributed: No. of beneficiaries
1	8	9	10	11	12
Andhra Pradesh	12,84,718*	12,84,718	3,21,552	2,16,000	1,47,947
Assam	5,74,990*	5,74,990*3	5,11,303*2	3,03,752*3	2,48,299*3
Bihar	3,00,000	2,34,046	1,30,990	1,30,990	1,38,005
Gujarat	65,000	56,260	4,069	Nil	Nil
Haryana	30,391	10,111	10,111	28,609*4	11,821*4
Himachal Pradesh	1,95,307	87,141	84,023	4,143	5,930
Jammu & Kashmir*5	—	—	—	—	—
Karnataka	4,00,000	1,23,235	N.A.	37,033	6,959
Kerala	1,50,000	1,14,471	68,984	44.998	66,397
Madhya Pradesh	2,80,725*	2,80,725	1,34,795	55,287	22,116
Maharashtra	3,70,650	3,32,407	3,61,137	2,79,709	74,452
Manipur	2,685	111	Nil	Nil	Nil
Orissa	2,00,000	1,24,394	1,10,843	94,335	69,966
Punjab	87,000	28,716	5,266	4,494	2,222
Rajasthan	7,94,000	2,48,248	2,26,293	1,30,617	26,910
Tamil Nadu	1,91,422	41,887	39,624	31,318	21,309
Tripura	5,074	2,464	1,044	458	407
Uttar Pradesh	2,79,529	2,79,529	2,39,532	1,94,096	1,65,372
West Bengal	2,00,000	1,11,850	66,700	40,392	64,601
Dadra &Nagar Haveli	9,390	8,967	5,982	3,192	1,412
Delhi	1,500	807	203	Nil	Nil
Pondicherry	3,012	2,042	951	791	902
Total	54,25,395	39,78,119	23,23,462	16,00,110	10,78,027

Appendix II — (Contd)

(area in acres)

States/Union Territories	Scheduled Castes		Scheduled Tribes		Others	
	Area	No of beneficiares	Area	No of beneficiaries	Area	No. of beneficiaries
1	13	14	15	16	17	18
Andhra Pradesh	1,05,838	74,062	39,908	24,371	70,254*	49,514*1
Assam	27,272*2	23,589	30,239*2	17,495*3	2,46,241*3	2,07,215*3
Bihar	50,841	74,057	14,895	14,544	65,245	49,404
Gujarat	Nil	Nil	Nil	Nil	Nil	Nil
Haryana	14,695*4	6,118*4	Nil	Nil	13,914*4	5,703*4
Himachal Pradesh	3,027	4,138	43	63	1,073	1,729
Jammu & Kashmir	—	—	—	—	—	—
Karnataka	Nil	Nil	20,722	3,873	16,311	3,086
Kerala	15,071	26,085	3,958	4,751	25,969	38,561
Madhya Pradesh	12,463	5,862	29,261	9,982	13,563	62,720
Maharashtra	91,177	23,889	50,156	15,192	1,38,376	35,371
Manipur	Nil	Nil	Nil	Nil	Nil	Nil
Orissa	28,836	22,979	41,185	28,093	24,314	18,892
Punjab	3,135	992	Nil	Nil	2,359	1,230
Rajasthan	46,599	11,167	15,023	4,069	68,995	11,674
Tamil Nadu	9,283	7,439	3	9	21,932	13,861
Tripura	21	16	82	88	355	303
Uttar Pradesh	1,21,526*6*7	1,23,085*6*7	—*7	—*7	72,570*7	42,287*7
Dadra & Nagar Haveli	28	13	3,164	1,399	Nil	Nil
Delhi	Nil	Nil	Nil	Nil	Nil	Nil
Pondicherry	580	696	Nil	Nil	211	206
	5,29,392	4,04,187 + 27,413	2,48,639	1,23,931 +12,461	7,81,691	4,85,308 + 24,727
	5,29,392	4,31,600	2,48,639	1,36,392	7,81,691	5,10,035

Notes ·

N A means not available

* These figures have been revised/readjusted upwards to tally with the area already declared surplus as the figures of area estimated surplus given by the state governments are lower than those of area already declared surplus.

*1 Includes an area of 58,705 acres given to 40,871 beneficiaries belonging to other backward classes.

*2 In case of Assam, figures in Cols 2 to 6, 10 to 13 and 15 are as stated by the state government in the monthly report for the month ending March, 1978

*3 Figures in Cols 9, 11, 12, 14, 16 and 18 are as stated in Chief Minister of Assam, D O. No. CMS-39976, dated 3rd February, 1979 and these pertain to the month of July, 1978

*4 Includes figures in respect of land distributed and beneficiaries for areas that have become available under the pro-revised ceiling laws.

*5 The Agrarian Reforms Act, 1976 was enacted and brought into force only recently and no report on the progress made has yet been received.

*6 Includes Scheduled Tribes also.

*7 In case of the State Government of West Bengal, figures shown in Cols. 1 to 9 pertains to the month ending June 1978 and figures shown in Cols. 10 to 18 pertains to the month ending March 1978 Even though the number of beneficiaries belonging to Scheduled Caste/Scheduled Tribes and others has been intimated, the area allotted to them has not been indicated. The information in this regard not shown in the statement is as given below :

	No of Scheduled Castes	*No. of Scheduled Tribes*	*Others*
West Bengal	27,413	12,461	27,724 (Includes 26 societies)

Source : Ministry of Agriculture and Irrigation, Department of Agriculture, Government of India, New Delhi.

RURAL CREDIT IN INDIA

A.K.Mukhopadhyay

The century-old plight of Indian cultivators particularly in terms of their perpetual and heavy debt burden was first traced out very concretely and comprehensively by the All-India Rural Credit Survey of 1951-52. Its important findings covered the sources of rural credit, both institutional and non-institutional, terms and conditions of loaning and the extent of debt burden on all the categories of farmers, along with a set of recommendations. The Survey revealed that in 1951-52, 7.3 percent of rural credit was supplied by institutional sources of the government, cooperatives and commercial banks, and the remaining 92.7 per cent by a host of non-institutional sources comprising professional moneylenders, agriculturist moneylenders, landlords, traders, commision agents, and relations. The extent covered by each source is given in Table 1. The data show the almost complete dependence of the cultivators on non-institutional credit agencies (1951-52). The borrowers were subjected to usurious rates of

Table 1 : Average Borrowings from Different Credit Agencies (1951–52)

Credit Agency	Borrowings					
	Cultivators		Non-Cultivators		All Families	
	Amount per Family (Rs)	Percentage	Amount per Family (Rs)	Percentage	Amount per Family (Rs)	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Government	6 9	3 3	1 0	1 5	4 9	3 1
Cooperatives	6 5	3 1	1 0	1.5	4 6	2 9
Relatives	29 8	14 2	10 3	15 5	23 0	14.4
Landlords[1]	3 2	1 5	3.2	4 9	3 2	2 0
Agriculturist money-lenders	52 1	24 0	16 4	24.8	39 7	14 8
Professional money-lenders	94 0	44.8	25.1	38.0	70.1	43 8
Traders and commission agents	11 5	5 5	6 5	9 9	9 8	6.1
Commercial Banks	2 0	0 9	1.3	2 0	1 8	1.1
Others	3.5	1 8	1.3	1.9	2 8	1 8
Total	209 5	100 0	66 1	100 0	159.9	100 0

1 To tenants only.

Source · Report of the All-India Rural Credit Review Committee, p 15

interest and unfavourable terms and conditions of loaning which often led not only to chronic indebtedness but also sale of land for repayment of debt. The Report also revealed that the rates of interest varied from 25 to 70 per cent.

Among the institutional credit agencies, cooperatives have a long history of development dating back to 1904, with the primary object of providing cheap credit to the farmers and protecting them from exploitation by the private moneylenders. But it was revealed that the cooperative movement, for nearly half a century, could not achieve more than 3 1 per cent involvement in the total rural credit supplied. This was because of a number of shortcomings in the cooperative movement on rural credit front. First, the coverage of cooperative credit — in terms of primary cooperative societies and cooperative membership was too inadequate to fill up the gap of different types of credit requirements. Secondly, the management of cooperative societies at the village level was concentrated in the hands of some big farmers who enjoyed the lion's share of credit from the societies. Finally, the cooperative credit was not at all supervised so that it could be put to productive use The rate of default was high. Thus, the basic weakness of the cooperative movement could be traced to human factor, *i e.*, lack of serious participation by the members who were supposed to be alert and responsible both in the matter of taking loans, their judicious and productive use, and timely repayment.

In view of their assigned role at that time the performance of government and commercial banks was naturally very meagre

So, the All-India Rural Credit Survey Committee advanced a set of comprehensive recommendations for the improvement of institutional credit supply to the rural areas giving much importance to cooperative pattern of credit institutions. The Committee recommended that cooperative credit structure should be strengthened through state partnership, vitalisation and expansion of the cooperative base Another major recommendation had for its aim the promotion of efficient business units, with emphasis on large-sized primary agricultural credit societies The integrated scheme, which was the Committee's innovation in the management of rural credit on cooperative lines, referred to the integration of cooperative credit with marketing with the purpose of ensuring remunerative prices to the farmers for their products and providing income stability. The Committee came to the conclusion that despite its several weaknesses, in the conditions which prevailed in India, there was no alternative to the cooperatives at the village-level as an institutional agency for agricultural credit

The other recommendations of the Committees were (i) the establishment of National Cooperative Development and Warehousing Board, (ii) the All-India Warehousing Corporation and State Warehousing Corpora-

tions, (iii) the creation of State Bank of India on the basis of major state partnership and the amalgamation of the Imperial Bank of India and other State-associated banks, and (iv) creation of certain special funds at the national, state and institutional levels for meeting certain specific needs. It was a multi-pronged, but coordinated effort on the lines that was contemplated in the Integrated Scheme of Rural Credit put forward by the Committee. This approach was considered essential in view of the increasing demand for credit under the impact of our Five-year Plans. On the eve of the First Plan (1951-52), the total agricultural borrowings, according to the Committee, were of the order of Rs. 750 crores.

These recommendations of the Committee were more or less accepted by the governments at the Centre and in the States. Measures for strengthening the cooperative credit movement were initiated by all the state governments through the Registrars of Cooperative Societies at the state level to cooperative inspectors and auditors at the block level, who were entrusted with the task of organising, registering, supervising and directing the cooperative societies for their better performance. Expansion of village-level cooperative societies and campaign for universal cooperative membership were undertaken. Large-sized multipurpose cooperative societies were established and the integration of cooperative credit with marketing and processing was also attempted in some places. The State Bank of India came into being on July 1, 1955 after takingover the Imperial Bank of India for promotion of rural credit; the creation of National Agricultural Credit (Stabilisation) Fund, National Agricultural Credit (Relief and Guarantee) Fund, National Cooperative Development Fund, All-India Warehousing Corporation and State Warehousing Corporations was created by the end of the fifties.

The All-India Rural Credit Review Committee (1969) made some observations on the implementation of the recommendations of the first committee in the following lines : "Progress has, no doubt, been made in these and other directions in recent years but the uncertainties, delays, and lack of effective action in such matters in the earlier stages did mean that some of the dynamism comtemplated in the Rural Credit Survey Committee's recommendations was lost in half-hearted effort and lack of Comprehension", (Report, p. 39). Until the creation of National Credit Council under the Social Control Policy of the Government of India in 1967, the trend of activities in respect of promotion of rural credit was on the line recommended by the first committee. Now it is possible on the basis of available data, to make a comparative study of the position of rural credit in terms of sources and percentages between 1951-52 and 1961-62 and 1971, as shown in Table 2. It reveals a picture of perceptible change in the percentage distribution of rural credit among various sources identified by the first committee. On the over-all plane, it is found that

Table 2 : Borrowings of Agriculturists by Source

(*Percentages*)

S No.	Credit Agency	1951–52	1961–62	1971 (June)	1978–79 Target
1.	Agricultural moneylenders	24.9	36 0	23 3	—
2.	Professional moneylenders	44.8	13 2	13 2	—
3,	Traders and Commission Agents	5 5	8 8	8 3	—
4	Others	17 5	23.3	25 0	—
5.	Non-institutional Agencies (1+2+3+4)	92 7	81.3	69.8	—
6.	Government	3 3	2 6	6 8	3 3
7	Commercial Banks	0 9	0 6	2 3	16 7
8.	Cooperatives	3 1	15 5	21 1	40 0
9	Institutional Agencies (6+7+8)	7 3	18 7	30 2	60 0

Source · 1. Report of All India Rural Credit Review Committee, 1969, p 100

2 Plan Documents.

3 Debt and Investment Survey, 1971–72. RBI.

the percentage of credit supplied by the non-institutional sources has got reduced from 92 7 in 1951-52 to 81. 3 in 1961–62 and then to 69.8 in 1971 (June) This indicates that the role of institutional credit has got enlarged within two decades from 1951 to 1971. It was envisaged that by 1978–79 the institutional sector would cover 60 per cent of the entire credit supply in the rural areas There are some striking reasons why the institutional sector could enlarge the magnitude of rural credit as it stands today Apart from the enlarged role assigned to cooperative credit from 1954–55 the impact of the creation of State Bank of India with a major objective of promoting rural credit, nationalisation of 14 major commercial banks in 1969 with the same objective, and the role to "lead banks" in their respective districts was clearly felt on the total supply of institutional credit From as meagre a percentage as 2.3 in 1971 (June), the involvement of the commercial banks in the supply of rural credit has now come to nearly 10 per cent. In view of the rate of progress in both cooperative and commercial bank sectors, it may not be possible to achieve their respective targets of 1978–79, *i. e.*, 40 per cent for cooperative sector and 16 per cent for the commercial bank sector. The realistic expectation is that by 1978–79, the institutional sector would take over about 43 per cent of the non-institutional credit

We may now examine the nature and dimension of the long-term growth of cooperatives from 1950-51 to 1977-78 in terms of the number of cooperative societies at primary level, membership in those societies and their funds and management Table 3 gives the entire picture from which

Table 3 : Agricultural

Item	1950-51	1955-56	1960-61	1968-69
I. *Primary* :				
Agricultural Credit Societies (Short & Medium term loans)				
1. No. of Societies (lakhs)	1.05	1.60	2.12	1.68
2 Percentage Villages Covered	N.A.	N.A.	75	92
3. Membership (lakhs)	44.08	77.91	170 41	291.73
4. Percentage agricultural population covered (estimated)	9	15	30	42
5. Average membership per society	45	49	80	174
6 Paid up share capital (Rs. crores)	7.61	16.80	57.75	167.31
7. Deposit (Rs Crores)	4 28	7.04	14 59	56 84
8. Working Capital (Rs. Crores)	37.25	79.10	273.92	812 22
9. Loans advanced during the year (Rs. Crores)	22 90	49.62	202.75	503.97
II *Land Mortgage Banks*				
1. No of Banks				
(a) Central	5	9	18	19
(b) Primary	286	302	463	740
2. Loans advanced during the year to individual (Rs. Crores)	1.38	2.86	11.62	148. 6
3 Loans outstanding with individuals (Rs. Crores)	6 59	13 47	37.74	402 15

Source : 1. Indian Agriculture in Brief, 16th Edition

2. Report 1978-79, Ministry of Agriculture and Irrigation, Dept. of Rural Development, New Delhi.

Credit Cooperatives

1969–70	1970–71	1971–72	1973–74	1974–75	1975–76	1976–77
1 63	1 61	1 57	1 54	1 53	1 41	1 23
94	95	95	95	96	97	96 29
297 65	309 63	320 09	349 56	364 42	412 44	448 32
NA	NA	38	41	41	45	40 00
183	193	203	227	238	293	365
188 70	205 74	224 83	271 06	296 29	372 41	377 31
62 67	69 46	74 78	89 28	101 05	127 91	142 32
921 64	1,153 40	1,276 17	1,580 28	1,801 48	1,917 19	2,394 29
542 00	577.88	614 53	760,46	900 83	998 67	1,210 58
19	19	19	19	19	19	19
809	865	869	857	872	870	892
155 48	170 36	154 44	158 09	180 76	191 60	278 08
513 23	636 16	786 51	914 53	983 46	903 31	1,193 35

it is evident that the growth of agricultural credit societies and their membership was of very considerable magnitude. During the period 1950-51 to 1970-71 the number of societies grew from 1. 05 lakhs to 1 61 lakhs but there has been a declining trend from 1971-72 to 1975-76 presumably because of elimination of some defunct societies The membership rose from 44.08 lakhs in 1950-51 to 412 04 lakhs in 1975-76 and 448.32 lakhs in 1976-77. Village-wise, it has covered 96.29 per cent of villages and 40 per cent of agricultural population in 1976-77. In respect of paid-up share capital, deposits, working capital and loans advanced, there has been a steady progress in aggregate during this said period The operations of the land development banks have picked up considerably in the second decade in particular Between 1968-69 and 1976-77, long-term loans outstanding with individuals have become more than double. This also indicates the emergence of a technological breakthrough and a scientific temper in Indian agriculture.

Despite an apparently impressive growth of cooperatives—both in number of societies and membership, and financial resources. there is still unevenness of their distribution regionally as well as sectorally (Table 4).

In respect of the rate of cooperative credit development, the states are classified into three groups by the Planning Commission on the basis of per-hectare short-term advances administered by the primary credit societies. It is evident from Table 4 that there are five States in Group 'A' where per-hectare advances have been either Rs. 45 or more and they have accounted for 57 per cent of the total short-term advances in 1973-74. These five states may be regarded as "developed" for this limited purpose on this criteria. The Group 'B' States numbering seven may be described as "developing" and they have deployed Rs. 20 to 45 per hectare and their share in the total is 32 per cent in the same year. The remaining nine States may be characterised as "backward" or "underdeveloped" as they distributed less than Rs 20 per hectare and contributed only 11 per cent of the total. There are slight modifications to this classification if we take long-term loans outstanding as the basis according to which the Southern, Western and Punjab-Haryana regions appear as advanced, and the Eastern, North-Eastern and Rajasthan regions as backward, comparatively. This imbalance in cooperative development is now a very serious problem in spatial terms.

Another major problem of cooperative credit is the incidence of huge overdues. During the year ending June, 1977, the percentage of overdues to outstandings was 5 at the level of State Cooperative Banks, 33 at the level of Central Cooperative Banks and 43 at the level of the Primary Agricultural Credit Societies. During 1977-78, there has been improvement in states like Punjab, while in some others like Tamil Nadu the position has worsened.

Larger conversion facilities had been availed of by the cooperative system from the year 1972-73 onwards so that the short-term loans which

Table 4 · Regional Disparities in Cooperative Credit

S No.		Criteria	Group and names of States	Total short-term credit disbursed in 1973–74 (assumed) (Rs crores)	Planned growth rate (percentage (per annum)	Short-term credit to be disbursed in 1978–79 (Target) (Rs crores)
			'A'			
1	(a)	Per hectare short-term advances by primary credit societies, Rs 45 or more (with reference to gross area sown)	Punjab, Kerala, Gujarat, Tamil Nadu and Maharashtra	396	10	644
			'B'			
	(b)	Between Rs 20 and Rs 45	Andhra Pradesh, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Madhya Pradesh, and Uttar Pradesh	224 5	15	456
			'C'			
	(c)	Less than Rs 20	Assam, Bihar, Meghalaya, Orissa, Rajasthan, West Bengal, Manipur, Tripura and Nagaland	80	20	215
			'A'			
2	(a)	Per hectare long-term loans outstanding (with reference to net area sown) more than Rs 60	Tamil Nadu, Punjab, Gujarat, Andhra Pradesh, Maharashtra and Haryana	N.A	25	N A.
			'B'			
	(b)	Between Rs 30 and Rs 60	Uttar Pradesh, Karnataka and Kerala	N A.	50	N A.
			'C'			
	(c)	Less than Rs 30	Rest of the states (12)	N.A	100	N A.

Source. Drafted from Draft Fifth Five-year Plan 1974–79, pp 84–85.

become overdue on account of natural calamities are converted into medium-term loans. The Reserve Bank of India grants limits out of the National Agricultural Credit (Statutisation) Fund In 1977–78, the Cooperative Banks drew Rs. 102 85 crores from this Fund.

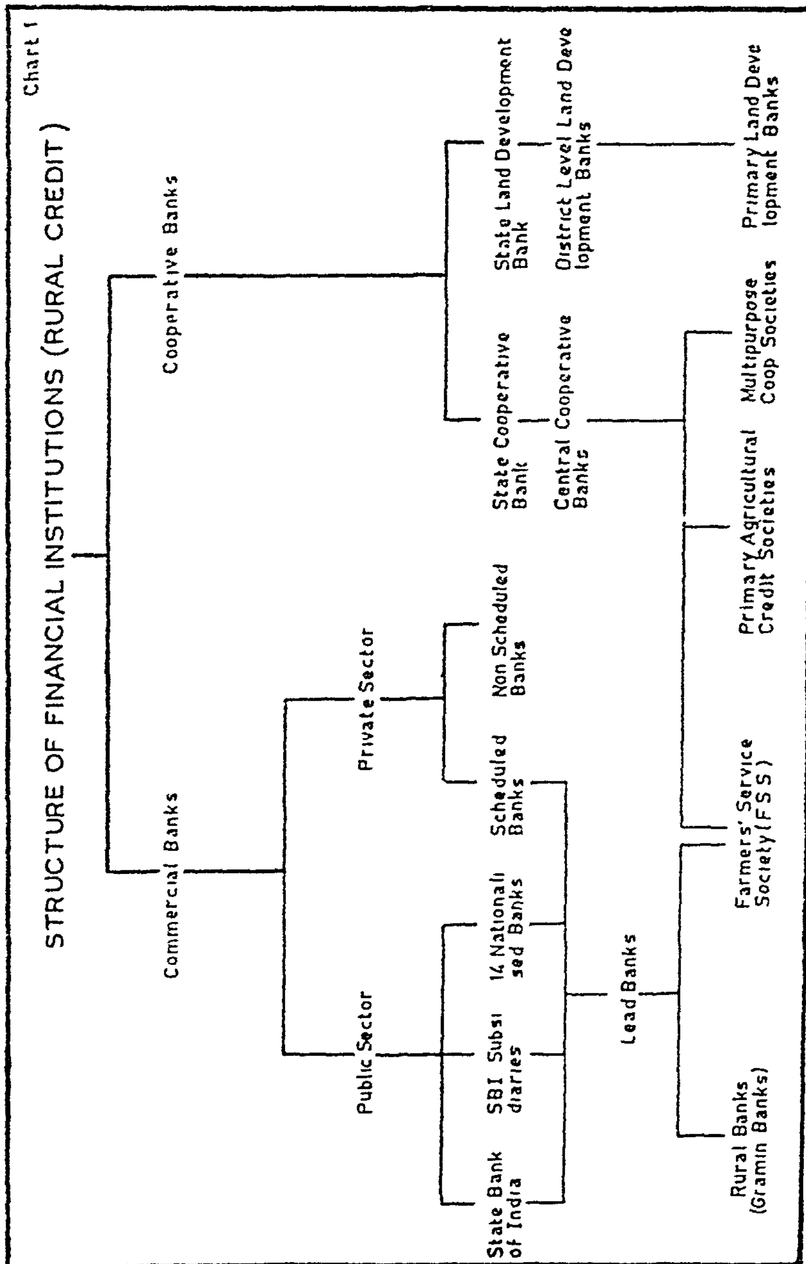
Commercial Banks

As mentioned earlier, the assignment of a bigger role to commercial banks in rural development is a new dimension in the institutional structure of rural credit. Despite the creation of the State Bank of India as the biggest commercial bank in the public sector for promoting rural credit, the actual spurt in enthusiasm to serve the agriculturists was found after the nationalisation of 14 major commercial banks in 1969. Since the nationalisation there has been a revolutionary change in the philosophy of lending by commercial banks This change is mainly two-fold . the transformation of purely commercial banks into development banks, and the diversification of bank operations across the traditional boundaries to cover agriculture, more accurately, the rural sector as a whole As a result, the burden of risk and responsibility both in terms of business and social commitment of the banks as change agents has become heavier Because of inexperience of the rural situation in terms of its complex agrarian relations and general socio-economic backwardness, the commercial banks operating in the rural areas have to be cautious and careful about the various types of problems to be tackled

Lead Bank Scheme

In 1967, the Gadgil Study Group suggested the adoption of area approach to banking development whereby commercial banks would be assigned particular districts where they were to act as pace-setters, providing integrated banking facilities, and in this way, all the districts in the country were to be covered. Acting upon the basic idea underlying this area approach, another committee under the chairmanship of F. K. F. Nariman made specific recommendations for setting up 'lead banks' for each of the underdeveloped districts and taking into account the recommendations of both the study groups, the Reserve Bank of India allotted various districts in the country, other than metropolitan centres and Union Territories of Delhi, Chandigarh and Goa, Daman and Diu, among the public sector banks and three private sector banks. The "Lead Bank" Scheme, therefore, constituted a consortium approach on the part of the commercial banks to the problem of banking development based on area approach

After the adoption of the area approach, the selection of centres for branch expansion by banks was sought to be based on the developmental needs of the districts as they emerged in surveys of banking and credit needs of the districts conducted by the lead banks. The Lead Bank Scheme facili-


Chart 1
STRUCTURE OF FINANCIAL INSTITUTIONS (RURAL CREDIT)
Commercial Banks
Cooperative Banks
Public Sector
Private Sector
State Bank of India
SBI Subsi diaries
14 Nationali sed Banks
Scheduled Banks
Non Scheduled Banks
State Cooperative Bank
Central Cooperative Banks
State Land Development Bank
District Level Land Deve lopment Banks
Lead Banks
Rural Banks (Gramin Banks)
Farmers' Service Society (F S S)
Primary Agricultural Credit Societies
Multipurpose Coop Societies
Primary Land Deve lopment Banks

tated massive branch expansion and during the first phase covering the period from mid–1969 to mid–1975, as many as 10,468 new offices were opened in the country, which were more than the total number of offices functioning at the time of nationalisation of the major banks. Table 5 gives the picture of expansion of public sector banks and other commercial banks. It is evident from Table 5 that the expansion of the branch offices of all public sector banks rose from 6,596 on June 30, 1969 to 15,559 on June 30, 1978, suggesting 52 5 per cent increase during the period.

The district credit plan formulated in the second phase of the Lead Bank Scheme gives indications of the volume of credit demand likely to arise under the various bankable schemes in the district, block–wise. The estimate of credit demand is presented sector-wise, *i e*, for crop loans, agricultural term loans and for meeting the working capital and term loan requirements of industries which are expected to come up in the district. Similarly, the estimates of credit demand are also provided for the development of the tertiary/services sector comprising transportation, retail trade, community services, production schemes for helping the weaker sections. The estimates given in the credit plan can help in guiding the branch expansion policy of commercial banks on the assessment of the strength of the cooperative societies In the areas where cooperatives are not strong, centres could be identified where commercial bank branches could be opened. In fact, a credit plan if carefully drawn up, can be used as a guide for branch expansion or even for deciding whether there is need to set up a regional rural bank In short, the Lead Bank Scheme has opened up new vistas in the field of rural banking

With this background of Lead Bank Scheme characterised by bank branch expansion and district credit plan with area development approach, the growth of advances to agriculture and other hitherto neglected sectors by public sector banks is considerable as shown in Table 6 covering the period from June, 1969 to June, 1978 First, the number of accounts in direct finance in agriculture rose from 1,60,020 in June, 1969 to 47,12,072 in June, 1978 Within the same period in the same type of finance, the amount of advance outstanding rose from Rs 40.21 crores to 1,235.98 crores. If number of accounts and advances for all the purposes of finance taken together for the same period, the corresponding figures stand respectively as 2,60,142 and 76,51,727 (accounts) and Rs 3,016.76 crores and Rs 13,215.00 crores (advances).

It is also imperative to see exclusively the position of 14 nationalised banks in respect of the extent of expansion of branches and share of priority sector to total advances as shown in Tables 7 and 8 It is evident from Table 7 that the number of rural branches of 14 nationalised banks rose from 828 in 1969 to 4,997 in 1977 Table 8 shows that their outstanding advances to the priority sectors was Rs. 2,027.63 crores in June, 1977 as against

Table 5 : Branch Expansion of Public Sector Banks and Other Commercial Banks

		Number of offices as an					Increase between 30 6 69 and 30 6 78	Increase in the number of offices in Rural Centres*	% of the Col 8 to Col. 7
		30 6 69	30 6 75	30 6 76	30 6 77	30 6 78			
	1	2	3	4	5	6	7	8	9
A	State Bank of India	1,569	3,475	3,922	4,359	4,183	3,244	1,717	52 9
B	Subsidiaries of S B I	893	1,739	1,848	2,000	2,192	1,299	576	44 3
C	14 Nationalised Banks	4,134	9,863	11,010	12,543	13,745	9,611	4,608	47 9
D.	Regional Rural Banks	—	—	112	780	1,405	1,405	1,275	90 7
	Total of public sector banks (A+B+C+D)	6,596	15,077	16,892	19,682	22,155	15,559	8,176	52 5
E	Other Indian Scheduled Commercial Banks	1,319	3,385	4,047	4,858	5,659	4,340	1,815	41 8
F	Foreign Banks	130	131	130	130	129	–1	–1	—
G	Non-scheduled Banks	217	137	151	132	73	–144	–20	–13 9
	Total of all Commercial Banks	8,262	18,730	21,220	24,802	28,016	19,754	9,970	50 5

* Rural — Centres — Places with a population up to 10,000

— The reduction in the number of offices of the non-scheduled banks is due to

(i) the inclusion of some of them in the second schedule to the Reserve Bank of India Act, 1934 and (ii) taking over certain non-scheduled banks by the State Bank of India and other scheduled banks

Note The increase in the number of offices in Rural Centres represents the difference between the number of offices at such centres as on 30th June, 1969 (classified on the basis of 1961 census) and the number of offices at Rural Centres as on 30th June, 1978 (classified on the basis of 1971 census)

Source · Economic Survey, 1978–79, p 93.

Table 6 : Advances to Agriculture and Other Hitherto

	June 1969		June 1974	
	No of Accts.	Amount outstanding	No. of Accts	Amount outstanding
1 Agriculture				
(a) Direct finance*	1,60,020	40 21	16,30,127	391 58 (5.8)
(b) Indirect finance	4,461	122.12 (4 1)	2,53,644	194.10 (2.9)
2. Small Scale Industries**	50,850	251.07 (8 5)	2,01,409	868.33 (13.0)
3 Road transport operators	2,324	5.49 (0 2)	63,572	83.37 (1.2)
4 Retail trade and small business	33,241	19.37 (0 6)	3,19,682	117.68 (1.8)
5. Professional and self-employed persons	7,769	1 91 (0.1)	1,80,492	29.78 (0.4)
6 Education	1,477	0 80 ( )	11,735	3.49 (0 1)
Total	2,60,142	440.97 (14 9)	26,60,661	1,688.33 (25.2)
Total advances by these banks		3,016.76		6,692 00

@ Provisional

* Exclude advances to plantation other than developmental finance

** No. of units

Neglected Sectors by Public Sector Banks

(Rs. crores)

June 1975		June 1976		June 1977		June 1978@	
No of Accts	Amount out-standing	No of Accts	Amount out-standing	No of Accts	Amount out-standing	No of Accts	Amount out-standing
20,66,316	511 47 (6 7)	30,63,952	726 32 (7 3)	39,86,010	950 70 (8 2)	47,12,072	1,235 98 (9 4)
3,23,425	256 55 (3 3)	3,72,154	277 61 (2 8)	5,60,249	324 38 (2 8)	5,90,119	421.76 (3 2)
2,29,031	942 67 (12.3)	2,88,329	1,099 15 (11 1)	4,30,434	1,315 29 (11 3)	5 26,451	1,640 95 (12.35)
73,446	113 37 (1 5)	1,07,895	190 40 (1 9)	1,70,415	252 78 (2 2)	1,96,800	305 52 (2 3)
3,90,228	134 23 (1 7)	5,60,770	174 24 (1 8)	8,89,215	225 86 (1.9)	10,13,682	295 43 (2 2)
2,07,441	36 73 (0.5)	3,10,344	53 06 (0 5)	5,03,656	71.61 (0 6)	5,82,749	86 34 (0 7)
12,358	3 88 (0 1)	19,006	4 69 (0 1)	24,264	5.81 (0 05)	29,854	6 56 (0.05)
33,02,245	1,998 90 (26 1)	47,22,450	2,528 47 (25 5)	65,64,243	3,146 43 (27 0)	76,51,727	3,992 44 (30.2)
	7,654 00		9,928 00		11,643 00		13,215 00

Notes : 1. Figures within brackets indicate the percentage to total advances of these banks

2. Figures may not add to totals due to rounding.

Source : Economic Survey, 1978–79, p 94.

Table 7 : Branch-wise Performance of Nationalised Banks (1969–1977)

Name of the Bank	Total Branches		Of which Rural Branches		Percentage of Rural Branches to total branches		Per Branch Deposit (Rs lakhs)		Per Branch Advance (Rs lakhs)	
	1969	1977	1969	1977	1969	1977	1969	1977	1969	1977
1 Central Bank of India	673	1523	109	505	16 20	33 16	74 41	107 78	52 60	71 68
2 Bank of India	310	1135	44	428	14 19	37 71	134 14	146 22	90 98	96 94
3 Punjab National Bank	619	1401	106	536	17 12	38 26	63 18	101 04	36 60	62 81
4 Bank of Baroda	433	1210	84	462	19 40	38 18	81 97	128 99	54 00	82 26
5. Canara Bank	368	1105	77	350	20 92	31 67	50 34	98 32	34 10	64 71
6 Syndicate Bank	355	943	107	386	30 14	40 93	40 77	89 52	29 55	59 36
7 Union Bank of India	273	744	60	408	21 98	54 84	48 75	86 03	31 68	52 33
8 United Bank of India	200	1001	20	343	10 00	34 27	84 17	106 62	59 01	69 61
9 United Commercial Bank	372	1006	57	422	15 32	41 96	69 23	98 27	43 77	64 84
10 Indian Bank	219	725	16	200	7 31	27 59	37 66	85 28	27.17	54 95
11 Indian Overseas Bank	147	657	35	235	23 81	35.77	42 91	85 28	26 90	64 57
12 Dena Bank	259	704	61	278	23.55	39 59	52 36	72 78	33 26	50 80
13 Bank of Maharashtra	164	537	28	181	17 07	33.71	53 16	85 50	39 38	60.63
14 Allahabad Bank	169	695	18	263	10 65	37 84	73 91	64 11	50 67	39 56
All Nationalised Banks	4561	13386	822	4997	18 02	37 33	60 47	86 86	42 67	59 97

Source · Pigmy Economic Review

Rs 233 67 crores in June, 1969 an increase of 767 73 per cent. The share of priority sector advances to total advances of 14 nationalised banks has increased from 12 per cent in 1969 to 27 per cent in 1977.

Regional Rural Banks (RRB)

In recent times, there are a few striking developments in the field of rural credit, like the creation of Regional Rural Banks (RRB) and Farmers' Service Societies (FSS), Agricultural Credit Intensive Development (ACID) Scheme and Scheme for Agricultural Credit Stabilisation Fund The RRBs came into being as a result measures under 20-point Programme launched in 1975 The idea was that in order to fill the gap created as a result of the step towards eradication of rural indebtedness, a set of low-cost rural banks sponsored by the nationalised commercial banks would be set up at the door-steps of the farmers particularly where the cooperative structure was weak and commercial bank did not enter. A role of crucial importance was assigned to these banks for forging a link between other credit agencies and catering effectively to the needs of the marginal farmers, landless labourers, rural artisans who have remained outside the reach of all organised credit agencies During the initial year 1975 itself, six Regional Rural Banks were opened. Tables 9 and 10 show the growth of these Banks in terms of number of Banks, and their branches, deposits and advances in total and per branch position at the end of December 1977

But at the end of June, 1978, 48 Regional Rural Banks (86 districts in 16 states) were functioning through their 1405 branches and could disburse an amount of Rs 52 27 crores. Although the deposits of these banks were just 0.18 per cent of the deposits of commercial banks, their efforts on deposit mobilization front are praiseworthy since the areas of their operations were confined to relatively backward districts Secondly, as they are extending credit to small and marginal farmers and rural artisans the scope of mobilizing the meagre savings of these classes of borrowers is very much limited The per branch deposits of these banks are about Rs 2 81 lakhs and the amount disbursed per branch works out to about Rs 3 64 lakhs. These banks, and the likely trend can be studied with the help of the average levels of deposits mobilised and credit extended by the branches of the regional rural banks opened during different years The average levels of deposits and advances of the branches of the banks opened in different years are furnished in Table 10 It is noteworthy that 92 6 per cent of credit from these banks were advanced to the weaker sections only

The Committee on Regional Rural Banks headed by M L. Dantwala stated that these banks should be made an integral part of the rural credit structure, as it was found that within a short span of time, the banks have demonstrated their capability to serve the purposes for which they were established

Table 8 : Share of Priority Sector Advance to Total Advances

(*Rs, in lakhs*)

Name of the Bank	Priority sector Advances June 1969	Priority sector Advances June 1977	% increase in 1977 over 1969	% of priority sector advances to total advances 1969	% of priority sector advances to total advances 1977
1 Bank of Maharashtra	1943	9951	412	36 (1)	37 (2)
2 Central Bank of India	3216	22589	602	10 (8)	25 (12)
3 Bank of India	2248	21569	859	9 (9)	27 (10)
4 Canara Bank	1557	20407	1211	14 (6)	34 (3)
5 Punjab National Bank	1854	19136	932	8 (10)	26 (11)
6 Bank of Baroda	1606	19089	1089	9 (9)	31 (6)
7 Syndicate Bank	2858	18189	536	31 (3)	40 (1)
8 Union Bank of India	848	16106	1799	11 (7)	34 (4)
9 United Commercial Bank	1439	12405	762	11 (7)	28 (8)
10 United Bank of India	649	10448	1510	6 (11)	23 (13)
11 Indian Bank	1249	10066	706	21 (5)	28 (9)
12 Indian Overseas Bank	1532	9449	517	34 (2)	30 (7)
13 Dena Bank	1813	8647	377	24 (4)	32 (5)
14 Allahabad Bank	555	4712	749	6 (11)	22 (14)
All Nationalised Banks	23367	202763	768	13	27

Source · Pigmy Economic Review

Table 9 : Performance of Regional Rural Banks at the end of December, 1977

Year	R R Bs No	Branches No	Deposits (Rs 000's)	Credit* (Rs 000's)
1975	6	200	78660	91552
1976	34	908	239327	323156
1977	8	79	15620	17226
Total	48	1187	333607	431934

*Amount disbursed

Table 10 : Progress of the Business of the R. R. Bs.

(*Rs in lakhs*)

Years of Opening the RR Banks	Per Branch Deposits	Per Branch Advances
1975	393	458
1976	264	356
1977	198	218

Source : Pigmy Economic Review.

Farmers' Service Society (FSS)

In recent times there have been certain new developments in the field of cooperative credit One is, as mentioned above. the creation of Farmers' Service Society Following the recommendations of the National Commission on Agriculture, this new cooperative society which aims at catering to all sorts of productive efforts of the village people was started in 1976 all over the country. The peculiar feature of this society is that though based on cooperative lines, it is sponsored and managed either by commercial bank or state cooperative bank, as the case may be The objectives and functions of the society are so comprehensive as to cover the entire spectrum of rural development

Membership of the society is open to small, marginal farmers and agricultural labourers as well as other farmers, but the farmers belonging to the former groups are expected to predominate the membership, *i e*, more than 50 per cent

The management of the society shall vest in a Board of Directors composed of three members one being nominated by the Registrar of Cooperative Societies, second being nominated from SFDA/MFAL and the third one being a nominee of the financing bank; the elected members will be five—three elected by the general body from among small and marginal farmers and agricultural labourers and two from the rest of the farmers. The Managing Director to be appointed by the financing Bank will be the ex-officio director of the society. There will be two representatives of the sponsoring bank on the managing committee

In certain places, the formerly Large-size Multipurpose Cooperative Society has been converted into FSS and in other places it has been newly organised. Although this society is comparatively new in the structure of rural credit, its performance is satisfactory in most of the individual cases

Agricultural Credit Intensive Development (ACID)

The Agricultural Credit Intensive Development (ACID) Scheme has been introduced in 41 districts for strengthening cooperatives through concentration of efforts and resources A sub-committee was set up by the Agricultural Credit Board at its meeting held on July 18, 1977 with M. L Dantwala as chairman to guide the bank in matters of policy and implementation The main activity during the year, under the scheme, pertained to the preparation of Credit and Action Programmes for the selected districts In these programmes an effort is made to : (*i*) identify the on-going bankable schemes financed by various agencies and also those that might be formulated in the near future, (*ii*) assess their credit requirements in a realistic manner; (*iii*) suitably adjust the credit programmes of the concerned financial institutions operating in the district, and (*iv*) specify the action that is necessary to implement the programme. Such programmes

have already been prepared in respect of nine districts, *viz.*, Quilon (Kerala), Dule and Aurangabad (Maharashtra), Mehsana (Gujarat), Rae Bareili (Uttar Pradesh), Madurai (Tamil Nandu), Raipur and Jhabua (Madhya Pradesh) and Purnea (Bihar) Steps have also been initiated in 13 other districts for preparation of these programmes In pursuance of the objective of the Scheme to strengthen the banks organisationally and operationally, staffing pattern studies of State Cooperative Banks and Central Cooperative Banks were undertaken in Gujarat, Kerala and Haryana in consultation with the state governments and State Cooperative Banks.

Scheme of Agricultural Credit Stabilisation Fund

Under this scheme, assistance is given to the Apex Cooperative Banks for building up their Agricultural Credit Stabilisation Fund. This is utilised for granting conversion of short-term loans to medium-term loans in respect of loans in areas affected by natural calamities. The total provision for Fifth Five-year Plan was Rs. 14 50 crores During the Fifth Plan Rs. 13 72 crores were spent. The provision made for the current financial year was of the order of Rs 8.40 crores. Against this, a sum of Rs 5.60 crores was released to the concerned state governments up to November, 1978 Due to recent floods in the states of West Bengal and Uttar Pradesh, additional funds are being provided to meet the demand in the affected areas

Financing of Cooperatives by Commercial Banks

In order to bridge the gap between the demand for short and medium-term credit and the credit actually provided by cooperatives and commercial banks, particularly when the District Cooperative Central Banks have been classified by the RBI as weak, either financially or administratively, a scheme for the financing of Primary Agricultural Cooperative Societies by commercial banks was evolved in 1969–70. The scheme was initially introduced in 49 districts in five states (Andhra Pradesh, Haryana, Madhya Pradesh, Karnataka and Uttar Pradesh) purely as a transitional measure providing for the ultimate transfer of the societies attached to the commercial banks to the District Central Cooperative Banks as and when they reached a stage of the required stability and strength prescribed by the Reserve Bank of India This policy of takeover of cooperatives by commercial banks subsequently underwent certain drastic changes It was decided that this policy would also be applicable in those areas where cooperatives are not so weak as mentioned earlier. The ceding of cooperatives to the commercial banks would not be merely as originally envisaged, it might be of permanent nature On the same lines, the commercial banks would enlarge the areas of cooperatives, even by organising cooperatives themselves.

Now, the scheme of financing of 3,036 Primary Agricultural Credit Societies in 116 districts by 24 commercial banks through their 588 branches was in operation in 12 states, *viz.*, Andhra Pradesh, Assam, Bihar, Haryana,

Jammu & Kashmir, Karnataka. Madhya Pradesh, Maharashtra, Orissa, Tripura, Uttar Pradesh and West Bengal, as at the end of December, 1977. The average number of societies per branch in all the states taken together worked out to five as against the norm of ten societies per branch for operational viability of the scheme and optimum utilization of the field staff. During 1977–78 (up to December, 1977) commercial banks financed 2.066 societies or 68 per cent of the societies taken by them, and provided short-term agricultural loans of 19 55 crores to 2.066 societies and medium-term loans of Rs 2.10 crores to 476 societies

The average short-term loan disbursed to societies increased from Rs. 0 34 lakhs in 1970–71 to 0 93 lakhs in 1976–77 which was still below the norm of Rs. 2 00 lakhs of loan business that was envisaged for a society to attain viability. The overdues at the society level increased from Rs 14 8 crores (48 per cent of demand) in June, 1976. to Rs. 21.1 crores in June, 1977 (56 per cent of demand)

One of the main elements of the organisational programme was the appointment of full-time paid secretaries. States have been advised to form cadres of full-time paid secretaries with the credit fund at the state level. The states of Assam, Haryana, Madhya Pradesh, Manipur, Meghalaya, Orissa, Rajasthan, and Uttar Pradesh have set up cadres Andhra Pradesh, Bihar, Himachal Pradesh, Karnataka and Kerala have accepted this recommendation.

Credit for Weaker Sections

The Government of India is very much eager to help the weaker sections consisting of small and marginal farmers, agricultural labourers and village artisans; Scheduled Castes and Scheduled Tribe people Besides the reorganisation of credit structure—both cooperative and commercial banks—in favour of those people, a few measures have been planned and implemented to provide easy credit to them. One is differential rate of interest (DRI) to the extent of 4 per cent to the marginal farmers and Scheduled Castes and tribal farmers through commercial banks. Now. 2 per cent of their total rural credit would be earmarked under the DRI scheme

The second measure is the consumption credit scheme for the weaker sections In view of the situation that the small farmers need certain amount of money as consumption expenditure on various items of needs, sometimes regular, sometimes accidental. including marriage, education, medical care and religious ceremonies, it was decided that the maximum amount of Rs 250 per family might be advanced by way of consumption loans which would be jointly provided by the primary agricultural credit societies and other administrative departments of the state government. The scheme is slowly picking up. With a view to cover the high risk involved in extending consumption credit to weaker sections of the community, a central

sector scheme namely Scheme of Risk Fund for Consumption Credit has been introduced in 1977–78. Under this scheme. 5 per cent of the loans provided to the weaker sections, i e , those having NIL holding or holding up to 0.50 acre in the previous day are reimbursed to the State Government which provide an equal contribution During the financial year 1979–80 Rs. 0 40 crores have been provided. Most of the State/Union Territories have introduced this Scheme A sum of Rs 4.68 lakhs was released during 1977–78.

Thus, it is found that the share of weaker sections in the total amount of rural credit has increased from 32 per cent of the short and medium-term credit provided by primary agricultural credit societies to 38 per cent by June 30, 1977. As many as 10 03 million borrowers from among the weaker sections obtained this facility. In the case of commercial banks, of the total direct loans of Rs 442 crores as at the end of March 1977, 42 per cent was for this category.

Since the beginning of the present decade, serious attention has been given to the weaker sections through the implementation of SFDA and MFAL schemes which entirely depend upon the strategic input—credit extended by cooperatives and commercial banks The subsidy part (25 per cent to the small farmers , 33.3 per cent to the marginal farmers and agricultural labour and 50 per cent for the community asset building like community wells—dug or deep tubewell—for the weaker sections) is borne by the government It has been found that under the SFDAs, the short-term loan disbursed through cooperatives up to November, 1978 stood at Rs 3,152.46 lakhs, total medium-term loan up to November, 1978 since inception at Rs. 8.651.55 lakhs, and long-term loan for the same period at Rs. 11,443.18 lakhs Through commercial banks, the short-term loans disbursed in 1978–79 up to November, 1978 was Rs. 330 80 lakhs and the total term loan disbursed since inception was Rs 9,343 96 lakhs. From the government side, the total amount released up to November, 1978 since inception was Rs 17,686 70 lakhs and the total amount utilised on administration and subsidy to the weaker sections was Rs. 17,053 56 for the same period

Central Organisations for Rural Credit

Among the central organisations for rural credit, the Reserve Bank of India (RBI) and Agricultural Refinance and Development Corporation (ARDC) are the main organisations, the second may be treated as part of the first

The RBI, being the central banking institution in the country, has obviously a very important role in the national economy and it has a crucial role to play in the sphere of agricultural credit systems operating through cooperatives and commercial banks. Its Agricultural Credit Department is assigned with important tasks of undertaking occassional studies through its own staff and through certain expert committees appointed by it, and

thus framing policies on different aspects of rural credit, and regulation of the functions of all institutional credit agencies like cooperatives and commercial banks, ARDC. etc Secondly, the RBI is to extend financial resources to all those credit agencies for rural development

Agricultural Refinance and Development Corporation (ARDC)

It was established in 1963 as Agricultural Refinance Corporation (ARC) and renamed as above, *i e*, ARDC, in 1975 with the major objectives of augmenting the available resources in the country and providing refinance for agricultural production which includes not only crop husbandry but also dairy, poultry, pisciculture, plantations, horticulture, etc. on the basis of specific schemes to be prepared by the directly financing banks These schemes should have area approach conducive to close supervision and follow-up works and the schemes should be technically feasible and financially viable according to the standards of ARDC. There has been a phenomenal expansion of the refinance facilities provided by the Corporation over the last few years. It has increased from Rs 28.60 crores in 1969-70 to Rs 220 80 crores in 1976–77 and to Rs 234.40 crores in 1977–78. Up to November. 1978, out of the total disbursement of Rs. 1,083 crores by the Corporation, the SLDB has availed themselves of a total refinance of Rs 702 crores (64.5 per cent), Commercial Banks of Rs. 365 crores (33.5 per cent, and the balance of Rs 21 crores (2 0 per cent) was drawn by the State Cooperative Banks The SLDBs continue to be the principal agency drawing refinance from the ARDC

The majority of the schemes relate to minor irrigation. As at the end of November, 1978, the Corporation sanctioned 6904 schemes involving Rs. 1,944 crores. During 1977–78, it sanctioned 1714 schemes involving a commitment of Rs 318 crores as compared with 1248 schemes with a commitment of Rs. 285 crores sanctioned during the preivous year.

The ARDC has recently diversified its loan portfolio from minor irrigation to other types of investment During 1977–78. 1314 schemes of such type were sanctioned—more through SLDBs than through commercial banks. The Corporation is committed to ensure that at least 50 per cent of refinance provided would go to the small farmers and more number of schemes would be sanctioned in the SFDA areas. The Corporation has been associated with IDA-assisted agricultural credit programmes from 1970 onwards.

Agricultural Finance Corporation (AFC)

The Agricultural Finance Corporation is a consortium of commercial banks and has been acting as technical appraisal and consultancy agency for the member banks in the area of project formulation in the backward areas. The Corporation has also been working in very close association with various state governments in preparing viable schemes, which could be

supported by institutional financial agencies. During the last five years, 669 schemes with an outlay of Rs. 339 crores have been formulated.

Other State-level Organisations

In recent years, a number of state-level organisations have sprung up in order to assist rural development in general and weakar sections in particular. Some state governments have set up Corporations for Scheduled Castes and Scheduled Tribes and the Backward Classes in order to facilitate drawal of loans from the Corporations and Commercial Banks by these people by providing them with seed money with the lending banks for easier availability of credit for their economic development, and marketing of their manufactures

Present Trends in Rural Credits

To maintain the growing resilience in the agricultural sector it would be necessary to provide adequate finance The role of institutional finance for agriculture is crucial Recognising this the Five-year Plan (1978-83) envisages a sharp step-up in the volume of credit covering a wide variety of activities in the agricultural sector. Already a significant expansion in the supply of credit to the agricultural sector through Primary Cooperative Societies, Land Development Banks, Commercial Banks, Regional Rural Banks and Farmers Service Societies has taken place during the last few years In 1977–78, cooperatives increased their short-term loans for agriculture to Rs 1, 275 crores from Rs 1.062 crores in 1976-77. The total quantum of institutional credit from the cooperative sector increased from Rs. 565 crores in 1976-77 to Rs 767 crores in 1977-78 Aggregate direct institutional finance to agriculture amounted to Rs. 2,756 crores in 1977-78 as compared with Rs. 2,154 crores in 1976-77 Despite these developments, institutional credit still meets less than half the amount of agricultural credit actually needed Moreover, a greater part of such credit goes to the relatively better-off farmers. Therefore, the share of the small and marginal farmers which is already 37 per cent in the direct credit by scheduled commercial banks is to be raised to a minimum level of 50 per cent. There are still a number of problems in organising a satisfactory flow of institutional credit Besides procedural and administrative difficulties, the high percentage of overdues greatly restricts the recycling of available funds. Despite various measures introduced to reduce overdues, their percentage continues to be very high. This problem deserves greater attention

DEVELOPMENT OF SMALL AND MARGINAL FARMERS : A REVIEW OF POLICIES AND PROGRAMMES

T. K Chakravarty

The Problem

An overwhelming majority of our farmers possess extremely small areas of land (Tables 1 and 2) In 1971-72, about two-fifths of the owner farmers possessed land below 0.4 hectare, the average size of their farm was 0 09 hectare, and they owned only about 2 per cent of the total farm area One-fifth of the total farmers had land between 0 4 to 1.0 hectares with average size at 0.66 ha, and their share of the total land was less than 8 per cent. Farmers owning land between 1 to 2 ha constituted about one-sixth of all farmers, their average land possession was 1 44 ha, and their share in total holdings area was less than 15 per cent.[1]

Table 1 : Distribution of Ownership Holdings in India (1971-72)

(*Area owned in ha*)

Size groups of ownership holdings	Number of households and area owned (in '000)		
	No of Households	Area owned	Average area (ha)
(1)	(2)	(3)	(4)
Sub-marginal (Below 0 4 ha)	27600 (38 99)	2472 (2 07)	0 09
Marginal (0 4 — 1 0 ha)	13905 (19 64)	9201 (7 69)	0 66
Small (1 0 — 2 0 ha)	12141 (17.14)	17555 (14 67)	1 44
Semi-medium (2 0 — 4 0 ha)	9611 (13 57)	26221 (21.92)	2 73
Large (4 0 ha and above)	7546 (10 66)	64187 (53 65)	8 51
	70812 (100 00)	119636 (100 00)	1 69

Note Figures in parentheses are percentages to the total

Source · NSS 26th Round, No 215 (1971-72)

At the other end of the scale were the farmers owning more than 4 ha of land While they constituted only about 10 per cent of all farmers they owned more than half of the total area, with an average holding size at 8.51 ha Thus, we find a situation where three-fourths of the farmers with

Table 2 : Estimated Number of Households, Area Owned, and Household Size by Size Class of Household Ownership Holding All-India (1971-72)

S No	Size Class of household ownership holding	Number of households (000) Frequency	Percentage	Cumulative Percentage	Area owned (000' hectares) Area	Percentage	Cumulative Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	0 00 — 0 20	21770	30 74	30 74	824	0 69	0 69
2	0 21 — 0 40	5839	8 24	38 98	1648	138	2 07
3.	0.41 — 0 50	3502	4 94	43 92	1528	128	3 35
4	0 51 — 1 00	10403	14 69	58 61	7673	641	9 76
5	1 01 — 2 03	12141	17 14	75 75	17555	1467	24 43
6	2 03 — 3 03	6183	8 73	84 48	15195	1270	37 13
7	3 04 — 4 04	3176	4 48	88 96	11026	922	46 35
8	4 05 — 5 05	2371	3 35	92.31	10581	884	55 19
9	5 06 — 6 07	1246	1 76	94 07	6858	573	60 92
10.	6 08 — 8 09	1601	2 26	96 33	11083	926	70 18
11	8 10 — 10 12	920	1 30	97 63	8258	690	77 08
12	10 13 — 12 14	526	0 74	98 37	5741	480	81.88
13	12 15 — 20 24	816	1 15	99 52	12259	1025	92.13
14.	20 25 and above	318	0 45	99 97	9407	786	99.99
	All Sizes	70812			119636		

Gini Coefficient Concentration 0 6580

Source · National Sample Survey, 26th Round, July, 1971 — September, 1972, Number 215, Tables on Land Holdings All India, p 69

holdings below 2 ha possess less than one-fourth of land and only one-tenth of the farmers possessed more than half of the land

This situation of highly uneven distribution has resulted in gross disparities in production capacities and economic status of different categories of farmers The economic profile of the farmers in the categories below 2 ha is particularly distressing It is estimated that in 1970-71, nine-tenths of the small cultivator households had an annual receipt of less than Rs. 2 000, while half of the small cultivator households had less than Rs 1,000 (Table 3) [2] There was wide variation between states in this respect, however, as the data presented reveals The budget of the small cultivator households is, therefore, almost always a deficit one, ranging from 5 to 27 per cent between states (Table 4) [3]

Table 3 : Percentage Distribution of Small Cultivators Household by Anuual Receipt Class (1970-71)

Sector	State	Receipt class in rupees		
		Less than 1000	1000-2000	2000 - above
(1)	(2)	(3)	(4)	(5)
East India	Assam	27	49	24
	Bihar	53	39	8
	Orissa	66	32	2
	West Bengal	37	50	13
North India	Haryana	15	32	53
	Punjab	12	33	55
	Rajasthan	55	33	12
	J & K	15	49	36
	Uttar Pradesh	54	38	8
West India	Gujarat	37	45	18
	Madhya Pradesh	60	34	6
	Maharashtra	40	47	13
South India	Andhra Pradesh	57	38	5
	Kerala	39	48	13
	Mysore	49	41	10
	Tamil Nadu	60	36	4
All-India		49	40	11

Source NSS 25th Round

Note 'Small cultivators' as presented in this table was defined in NSS 25th round as those constituting the bottom 10% of all households in a given sample village, as per total assets Thus, this column is not exactly the same as small farmers owning 1 to 2 ha of land Perhaps these 'small cultivators' would belong mostly to the category of marginal farmers and partly to small farmers as defined generally in this paper

Table 4 : Per Household and Per Capita Income and Expenditure of Small Cultivators (1970–71)

State	Average Size of household	Total annual Income (Rs)	Per capita annual Income (Rs)	Total annual expenditure (Rs)	Per capita annual expenditure (Rs)	Per cent deficit or surplus
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assam	4 77	1575	330	2014	464	–22 00
Bihar	4 58	1051	230	1336	292	–21 00
Orissa	4 23	1883	209	1114	263	–21 00
West Bengal	4 57	1303	285	1384	303	– 6 00
Haryana	5 59	2570	460	2693	482	– 5 00
Punjab	4 93	2430	493	3180	605	–24 00
Rajasthan	4 40	1154	262	1469	334	–21 00
Uttar Pradesh	4 30	1080	251	1389	321	–22 00
Gujarat	5 31	1413	266	1927	303	–27 00
Madhya Pradesh	4 42	995	225	1327	300	–25 00
Maharashtra	4 80	1302	271	1672	350	–22 00
Andhra Pradesh	4 15	1031	250	1407	340	–27 00
Kerala	4 94	1267	256	1467	293	–14 00
Karnataka	4 65	1161	250	1568	337	–26 00
Tamil Nadu	3.97	967	244	1194	301	–19 00

Source NSS — 25th Round

Thus we find the large majority of the very small landholders in a situation of abject poverty and perpetual debt The combination of negative factors in this situation compound and complement each other to generate a vicious circle Handicapped by paucity of resources both in terms of land and own capital, his ability to mobilise resources becomes extremely limited. The average total asset of 'small cultivators' in India is Rs 2,753 only, although there is extreme variation between states, from Rs. 1.150 in Orissa to Rs. 15,419 in Punjab (Table 5)[4]. This puts his credit worthiness at a very low level. The All India Debt and Investment Survey (1971–72) concluded in its report on Capital Expenditure and Capital Formation in Rural Households that "the pattern of capital expenditure of large farmers *vis-a-vis*

Table 5 : Per Household Value of Asset and Loan Outstanding : Small Cultivator Household (1970–71)

State/Union Territories	Total asset (Rs)	Total loan outstanding (Rs)	Per cent of loan outstanding to total value of assets
(1)	(2)	(3)	(4)
Andhra Pradesh	1864 47	341 04	18 30
Assam	2750 19	104 04	3.78
Bihar	1644 83	229 02	13,92
Gujarat	4530 33	616 14	13 60
Haryana	10792 72	2357 27	21 84
Jammu & Kashmir	4276 33	225 01	5 27
Kerala	1346 62	91.22	6 77
Madhya Pradesh	2014 63	282 43	14 02
Maharashtra	4038 79	381 59	9 45
Karnataka	2690 35	364 71	13 56
Orissa	1150 19	117.77	10 24
Panjab	15419 89	868 60	5 63
Rajasthan	3619 52	773.54	21.37
Tamil Nadu	1838 37	354 55	19.29
Uttar Pradesh	2903 64	273.84	9 43
West Bengal	1735 49	97 17	5 60
Himachal Pradesh	4670 80	297 75	6 37
Manipur	1898 57	60.53	3 19
Tripura	1642 78	130 93	7 97
Delhi	6880 29	852 94	12 40
Goa, Daman & Diu	2428 91	80 62	3 32
Pondicherry	4625 60	38 27	0 83
All-India	**2753 19**	**353 00**	**12 17**

Source NSS 25th Round

the very small and marginal farmers was such that the large farmers spent relatively larger proportions of their expenditure on items which improve productivity of land such as wells, other irrigation resources and agricultural machinery, etc which tend to make rich farmers still richer"[5] This is to be expected with a negligible rate of capital formation in farm business for small cultivators The same report mentions in this context that the asset group up to Rs 2,500 accounting for 19 per cent of the households contributed only 1 per cent of the capital formation in farm business by cultivators, whereas the asset group of Rs. 30,000 and above accounting for only 12 per cent of the households contributed 57 per cent of the capital formation.[6]

Turning to the pattern of borrowing we find that the cultivators in lower asset groups tended to borrow mostly from non-institutional sources as compared with institutional sources (Table 6).[7] This trend has also been highlighted from the enquiries of the All India Rural Credit Review Committee, and the All India Debt and Investment Survey.

Among the several reasons for the small cultivator depending more on non-institutional sources of loan, the most imporant are his low asset position and credit-worthiness

Again, the small cultivator borrows more to meet his household expenditure. This is evident from the fact that the lower asset groups among cultivators spend as much as 58 to 67 per cent of their cash debts for household expenditure as compared with only 30 per cent for the asset group of Rs 10,000 and above (Table 7)[8] Only about 22 to 32 per cent of the cash debt of the lower group is used for farm or non-farm business.

The above analyses are broadly indicative of the precarious economic situation of the small farmers. Possessing only small bits of land, living in abject poverty and perpetual deficit, they face the prospect of a slow but sure sliding down the economic ladder towards bankruptcy, forced sale of the meagre land in their possession and finally joining the ranks of the landless

Policies Over the First Three Five-year Plans : A Review

In the earlier pages we have seen that the small farmer in general has been a neglected and bypassed majority among the farming population. The foregoing analysis also is indicative of the urgent need for radical measures to ameliorate their economic condition and bring them up to an economically viable level.

The gradual awakening to this fact and the possible consequences of allowing this extreme imblance to continue and grow further, took quite some time to come to a level of influencing our overall priorities in respect of rural development. In fact, in the first three Five-year Plans, this category of farmers were given only cursory attention. The programmes

Table 6 : Cash Debts of Households According to Institutional/Non-institutional Sources (1971)

(*Rupees in millions*)

Asset groups	Institutional sources		Non-institutional sources		Total	
	Amount of Debts	% to total debt of the Asset group	Amount of Debt	% of total debt of the Asset group	Amount	Percentage
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Up to 2500	1779	9.56	16823	90.44	18602	100
2500-5000	4169	14.48	24628	85.52	28797	100
5000-10000	10638	20.45	41368	79.54	52006	100
10000-20000	19171	28.06	49157	71.94	68328	100
above 20000	68682	42.59	92581	57.41	161263	100
Total	101439	31.74	224557	68.26	328996	100

Source : All India Debt & Investment Survey, 1971-72

Table 7 : Average Cash Debt for Individual Purpose Per Cultivator Household According to Asset Group All-India (1971-72)

Purpose	Asset groups (Rs)							
	0-2500		2500-5000		5000-10000		10000 and above	
	A	B	A	B	A	B	A	B
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1 Expenditure on farm business	85	18.7	83	29.3	156	38.8	5756	55.6
2 Expenditure on non-farm business	16	3.7	9	3.3	14	3.5	464	4.7
3 Household expenditure	294	67.1	164	57.8	201	49.8	2203	29.9
4 Repayment of debt	7	1.3	5	1.9	5	1.2	167	1.6
5 Others	38	9.2	23	7.8	27	6.7	651	8.2

N B. A = Average amount per household (in rupees).
B = Percentage share in total debt.

Source. All India Debt & Investment Survey, 1971-72.

bearing on small farmers proposed in the First Five-year Plan. consisted largely of land reforms including tenancy reforms, ceiling on landholdings, and encouragement of cooperative farming to solve their problems. However, although tenancy reforms made some headway, the bulk of the provision of Rs. 40 lakhs in the First Plan for carrying out experiments in cooperative farming was not utilised

The Second Five-year Plan did not add anything substantial to the proposals made in the First Plan in this respect but only emphasised that measures like cooperative farming, ceiling laws, land consolidation and tenancy reforms should be speeded up

Even the Third Five-year Plan did not reflect any fresh outlook in this regard While noting that the proposals for redistribution of land after the imposition of ceiling laws is not likely to yield any significant results, the Third Plan reiterated the stand taken in the earlier plans about cooperative farming

At this point it is necessary for us to take note of the development that took place in agriculture over this period During these fifteen years (three plan periods) concern for making the country self-sufficient in food production was paramount. Particularly, the Third Plan period was marked by intensive programmes for raising aggregate food production, *viz.*, the Intensive Agricultural District Programme and the Intensive Agricultural Area Programme However, the real spurt in food production came with the introduction of the High-yielding Varieties (HYV) Programme in the mid-sixties. The basic approach in IADP, IAAP and HYV programmes was to concentrate on such areas (in the case of IADP & IAAP) and farmers (in HYV programme) as had the maximum potentiality for quick increase in production, in terms of availability of infrastructure, and resources with the farmers Although these programmes did not rule out the inclusion of the small and marginal farmers, the natural propensity for field-level staff was to concentrate on the well-to-do large farmers with sufficient resources at their disposal. Thus, while the programmes did result in substantial increase in food production, this also resulted in accentuating economic disparities between the rich and the poor classes of farmers

All India Rural Credit Review Committee

In July, 1966, which was to be the first year of the Fourth Five-year Plan (the launching of the IV Plan was postponed by three years and it finally covered the period from 1966 to 1974), the All India Rural Credit Review Committee was appointed by the Reserve Bank of India "to review the supply of rural credit in the context of the Fourth Plan generally, and in particular, the requirements of intensive programmes of agricultural production throughout the country and to make appropriate recommendations".[9]

The Committee gave special attention to the question of credit for the small but potentially viable farmers. While reviewing the performance of the cooperatives in the field of rural credit, the Committee agreed with the generally prevailing view that the small farmers did not benefit from cooperative credit in proportion either to the numbers or to their needs. The Committee made many recommendations for meeting the needs of the small but potentially viable farmers. The Committee, which submitted its final report in December, 1969, just before the nationalisation of the 14 scheduled banks noted that the performance of commercial banks so far in respect of meeting the credit needs of the small cultivators was even more negligible when compared with that of the cooperatives

While making their proposals in respect of helping the small farmers, the Committee confined their attention only to such of the small farmers whose business was potentially viable provided support in terms of resources and technical guidance is made available to them. The sub-marginal farmers, *i.e* , those whose enterprise is not expected to be economically viable on the basis of on-farm activity alone, and agricultural labourers were left out in their proposals as the Committee felt that a farreaching programme of rehabilitation extending far beyond credit was required for these groups which were outside their purview. In respect of the small but potentially viable cultivators, the Committee felt that considering the immensity and urgency of the problem, even if considerations of social justice are set aside, the small farmers were significant from the point of view of aggregate production in the country, as there was proof to show that the productivity of small farmers was not inferior to that of the large farmers

The problem to the Committee was thus to indicate a strategy to help the potentially viable farmers by providing adequate support in respect of supplies, irrigation, services, etc. The Committee realised that the approaches so far being followed in IADP, IAAP, HYVP, etc. would not be adequate to reach these goals in respect of this exclusive category of clientele, as borne out adequately from a review of past experience. The clientele had its typical social and economic attributes and problems which require innovative measures and methodology, needing the full-time attention of people involved in this task. The need thus was felt for a special catalyst institution which would motivate and coordinate the other agencies towards achieving the goals of helping small farmers. To attain these goals, the Committee proposed the establishment of a special catalyst institution called the Small Farmers Development Agency. The role of this Agency was defined by the Committee as

1) Helping to identify the special problems of small farmers as producers;

2) Finding out the means by which they can be helped to be viable;

3) Indicating the arrangements required to achieve this, and

4) Undertaking the required measures by making fullest use of the available infrastructure and funds with the various agencies.

Of the three kinds of needs of the small farmers, *viz* , need for technology, inputs and credit, the proposed Agency was mainly supposed to act as an instrument for ensuring that the existing institutions such as the extension service, the input supply agencies and the cooperatives make their facilities available to the small farmers in the required quantity and at the right time.

Since credit was identified as the priority need for the small farmers, the Committee spelt out in some detail the role of the proposed Agency. It was suggested that the Agency itself was not to extend any credit Rather, it was to provide incentives to credit institutions so that they are better persuaded to shed their reluctance to extend credit to small holders

Apart from credit, the Agency was also to ensure availability of services In this respect, it was proposed to be left to individual agencies to determine whether the available infrastructure can handle the task or whether the Agency itself had to take it up

Although the Committee felt that the specific schemes and activities have to be decided upon locally, it set down the following broad guidelines for this purpose

1 Identification of Problems of the Target Clientele A major preparatory activity was to investigate and identify their problems and formulate a programme for their development in a manner that maximal use is made of existing institutions and authorities in providing the required services and supplies to serve the programme objectives

2. Identification of 50,000 Small Farmers to be Helped to Become viable in Five Years It was suggested that the precise definition of small farmers to be adopted for this purpose should be left to individual agencies, with reference to criteria such as gross production, extent of irrigation available, nature of tenancy and norms of viability The Committee warned of the danger of large farmers presenting themselves as small farmers and pre-empting the benefits of the programmes by resorting to devices like sub-division of holdings among family members, the cooperatives themselves using a facade of loans to a few small farmers to cover up large loans to large farmers, etc Close and effective supervision of credit was advised by the Committee to prevent this

3. Irrigation was viewed as the most important need of the Small Farmers. To this end, the Agency was to help individual farmers or groups of them in securing loans from cooperative banks and other agencies for digging and deepening of wells, construction of community wells, etc.

4. Ensuring Availability of Inputs The Agency was to ensure that the clientele obtained other inputs like seeds, fertilizers, etc. in required quantity

at the right time from the local sources of such supplies. Facilities for storage, transportation, processing and marketing as well as other services like extension guidance, etc also were to be made available to the small farmers

5 *Investment and Production Planning.* Plans for investment and production activities to be undertaken by participating farmers were to be drawn up by the Agency.

6. *Catalysing Credit Inflow* The Agency was to take up the cases of such of its clientele who were unable to obtain adequate credit and persuade the concerned agencies to make appropriate changes in their policies and procedure to accelerate the flow of credit to these people

Formulation of the SFDA Programmes

The Government of India, based on the recommendation of the All India Rural Credit Review Committee, launched the special programme of setting up SFDAs in selected districts of the country with more or less similar objectives and *modus operandi* as was recommended by the All India Rural Credit Review Committee

Although the Committee did not have any proposals for marginal farmers and agricultural labourers, the Government of India felt the need to have a similar agency approach to serve these categories of farmers Thus, for marginal farmers and agricultural labourers, a special programme called 'Marginal Farmers and Agricultural Labourers Development Agency' (MFALDA) was proposed. Both these programmes were initiated in 1970-71

Initially, 46 SFDA and 41 MFAL projects were started in the beginning of the Fourth Plan and they were to continue for five years. It was expected that the target of 50,000 small farmers in each of these SFDAs and 20,000 marginal farmers and agricultural labourers in each MFAL project would be adequately helped within five years to become viable entities.

However, based on the recommendations of the National Commission on Agriculture, in 1973, two major changes were initiated during the Fifth Plan period. Firstly, the number of projects were increased from 87 to 160 (more projects were added subsequently so that currently there are 168 SFDAs in 22 states and 3 union territories covering 1807 blocks in 200 districts). Secondly, the programmes for small farmers and marginal farmers and agricultural labourers were combined to make 160 composite SF/MFAL projects. These composite projects were titled SFDAs. Each Agency was to confine to a district and attempt to benefit a total number of 50,000 Small Marginal Farmers and Agricultural Labourers within the Fifth Five-year Plan period.

These programmes still continue after the Fifth Plan which was terminated on 31st March, 1978 Currently these programmes are being given

annual extentions, and the directives for continuation of SFDA during 1979-80 have been communicated to the project authorities.

Functions of the Agency

The major functions of the Agency were to identify the small farmers, investigate and identify their problems, formulate programmes incorporating measures to deal with them and devise ways and means to implement these programmes through existing institutions and authorities as far as possible. In relation to small farmers, the SFDA was expected to arrange the services and supplies required by them, arrange for irrigation in the area, help the clientele to secure loans from cooperative and other credit institutions, arrange for supply of inputs seeds and fertilisers, provide custom services with machines and implements, help in securing facilities for storage, transportation, processing and marketing of the produce, and to set up or establish any special services in furtherence of their economic interest.

The functions of the marginal farmers and agricultural labourers agencies were visualised as that of catalysts in promoting the economic interests of the participants in the programme, mainly through generation of fruitful employment The major functions of the MFALDA were to identify the eligible marginal farmers and agricultural labourers to be covered by the project, investigate their problems, formulate economic programmes for fruitful and gainful employment, promote rural industries, evolve adequate institutional finance and administrative arrangements for programme implementation and promote creation of common facilities for production, processing, storage and marketing of products

Organisation. It was visualised from the very beginning that the agencies were not to implement any programme on their own or handle credit by themselves, rather, they were to function as catalyst bodies persuading the existing institutions to implement the programmes With this end in view only a small staff was proposed It was suggested that the expenditure on the establishment of SFDA projects was to be kept to the minimum. These projects are thus headed by a Project Officer who is assisted by two or three Asst Project Officers and a small number of clerical and Class IV staff

These Agencies were registered as non-profit societies under the Societies Registration Act The governing body of the Agencies comprise of the Collector/District Magistrate as the Chairman, the Project Officer as the Member-Secretary and representatives from Central Government, different departments of the State Government, financing institutions, and also two non-officials as members

Programmes of the Agencies

Initially, the SFDAs were expected to proceed on the basis of the model plans to be drawn up for investment and production activities by the benefi-

ciaries. Likewise, the other agencies were expected to draw up model schemes for different categories of beneficiaries

Intensive Agriculture

The major focus in the programmes was on intensive agriculture including crop cultivation, horticulture, introduction of high-yielding varieties, new cropping patterns, irrigation, and land development, with supporting activities for marketing and custom services. During the Fifth Plan, in addition to irrigated agriculture, dry farming technology was also introduced. Thus, the approach to agricultural programmes in SFDA and MFAL areas were as follows :

i) In areas having assured water supply for irrigation, emphasis was to be placed on intensive agriculture, introduction of high-yielding varieties, multiple cropping, new cropping patterns including commercial and cash crops, and a package of practices in relation to such crops

ii) Water management techniques under irrigated conditions were to be taken up. These included—farm developments including consolidation of holdings, land levelling and shaping, layout and construction of proper irrigation water courses and field channels, field drains, etc. Consolidation of holdings was expected to be accorded priority in the area selected for the projects. Special efforts were to be made to bring together the holdings of small and marginal farmers within compact blocks, where preferential irrigation through state-sponsored community wells could be arranged

iii) Where surface water schemes or large-scale groundwater schemes were possible, the states were expected to assume responsibility to plan for irrigation schemes benefiting substantially, if not exclusively, small and marginal farmers Individual and community irrigation works in areas having groundwater potential based on hydrological and groundwater survey data were to be supported by the projects with assistance to the small and marginal farmers on the capital cost of investment on dug wells, tube-wells and similar lift-irrigation schemes.

iv) Introduction of dry farming technology for small and marginal farmers for rainfed areas was one of the important components of the Project The main emphasis was to minimise the effect of crop failure in years of scarcity and to provide for surplus from years of normal rainfall

Cooperative Farming

In 1972, the Union Department of Cooperation, in what appears to be an attempt to revive cooperative farming desired that cooperative farming

programmes should be attempted in the SFDA & MFAL projects on a pilot basis This was endorsed by the Department of Rural Development to the different agencies However, this seems to have not made any progress, as in the case of the earlier attempts.

Subsidiary Occupations

It was realised from the very beginning that programmes for economic upliftment of these clientele groups would have to go beyond land-based activities Thus, schemes for subsidiary occupations that were expected to generate extra income, like dairying, goat keeping, sheep rearing, piggery, poultry, fisheries, etc were taken up from the very beginning and have been components of the SFDA and MFAL programmes These programmes were to be taken up only in areas where potential demand existed and also adequate arrangements for providing the necessary linkages with market and availability of feed, veterinary services, etc were ensured. Over the period, the programme in dairying has emerged as the most important subsidiary activity Other programmes like poultry, fishery, etc are also being popularised in selected districts

Rural Artisans Programmes

During the first phase, *i e*, in the Fourth Plan period, the SFDA/MFAL programmes with sizeable number of rural artisans in their areas were advised to take up programmes for helping those of the artisans who did not have land beyond the ceiling. The objectives of these programmes were to provide all round training to each artisan to equip him to take up such profession collectively or individually, for which there was local demand and locally available resources The agencies were to subsidise the cost of tools and equipment up to 25 per cent and also provide a risk fund to cooperatives on the loans advanced on this account

At the end of the Fourth Plan this programme was discontinued and handed over to the Rural Industries Department In 1978-79, however, this scheme was revived under the SFDA and MFAL as a part of their activities.

Programmes for Agricultural Labourers

Although agricultural labourers have been included in the target groups to be covered, because of the fact that most of these programmes of these agencies are land based or related to animal husbandry, this group has tended to be relatively neglected Of course, the subsidiary occupations programme is also applicable to them. The Rural Works Programme was also expected to bring additional employment opportunities to these sections of the community

The *modus operandi* of the agency and the other institutions involved in this programme are described below ·

Selection of the Areas. In general, the projects have been located in areas with a predominance of SF/MF/AL, fairly strong infrastructure of financial institutions and availability of surface or groundwater resources. It was suggested that the programme be taken up on a compact area basis and gradually extended to cover larger areas

Definition of Target Groups For operational purpose the following definition of the beneficiaries were adopted :

Small Farmers – cultivators with landholding below 2 hectares of unirrigated land.

Marginal Farmers – Cultivators with landholdings up to 1 hectare of unirrigated land.

Agricultural Labourers – Cultivators without any landholding but having a homestead and deriving more than 50 per cent of their income as agricultural wages.

In case of Class I irrigated land as defined in the land ceiling legislation, the ceiling would be half of the areas indicated above.

Farmers with off-farm income of Rs. 200/- per month or above were not to be included under any programme of the agencies.

Identification of Potential Beneficiaries. This was one of the very first tasks of the Agencies. Surveys were to be carried out to locate and select farmers as per the definition adopted for different categories. On the whole the list of identified households was to include SF/MF/AL as well as Scheduled Caste and Scheduled Tribe households in the same proportion with which they occurred in the total population of the Agency's jurisdiction as per the latest census report For the purpose of identification, help from the block agency and the revenue authorities were to be obtained. The supervisory staff at the block-level as well as the Agency were to carry out test checks of a sample of identified households to ensure that the really deserving households are identified

Project Report. A project report outlining the main features of the area, its economic characteristics, infrastructure, cropping pattern, various schemes included in the project, *e.g.*, schemes for minor irrigation, credit for inputs, land levelling, provision of subsidiary occupation, storage and marketing facilities, development of communication, establishment of custom service units, and annual financial requirements, etc was to be prepared and submitted for approval of a Sanctioning Committee of the Government of India. The report was to be modified and finalised as per decisions of the Government of India

Model Plans. The Agencies were to draw up model plans for investment and production activities to suit the needs of participants in different kinds of situations.

Demonstrations/Training. The agencies were asked to extend financial help to the extension agencies for conducting demonstrations of the economics of the investment and new technologies advocated The help was to cover the full cost of inputs not exceeding Rs 200/- per demonstration The number of demonstrations targeted was 500 per SFDA and 200 per MFAL

Mobilising Credit for the Beneficiaries

The agencies were responsible for promoting the flow of short-term, medium-term and long-term credit to the beneficiaries from cooperative agricultural credit societies, central cooperative banks, land development banks and the commercial banks. To this end, the major efforts included the following:

i) Risk Fund Contribution The agencies themselves were not to extend credit They were authorised to provide assistance to the cooperatives in the form of risk fund grants for enhancing their loaning capacity. The pattern of assistance from SFDA and MFAL was as under:

		Composite projects	MFAL
A	*Primary Cooperative Society*		
i)	Small farmers	6 per cent	—
ii)	Marginal farmers and agricultural labourers	8 per cent	8 per cent
B.	*Central Cooperative Bank*		
i)	Small farmers	3 per cent	—
ii)	Marginal farmers and agricultural labourers	3 per cent	3 per cent

The calculation of risk fund was to be done on the amount of loan only However, in its latter phase of operation in 1974, Government made some amendment in the percentage of risk fund payable to the cooperatives, which was 4 per cent and 2 per cent of the additional quantum of short-term loan to the primary society and CCB, respectively In the case of long-term loan, the proportion of risk fund was 2 per cent of the total quantum of long-term loan advanced to each participant. No change was made in the case of medium-term loans

ii) Non-overdue cover to Weak Central Cooperative Banks. In some project areas, the district central cooperative banks were not in a position to provide the requisite non-overdue cover and utilise the sanctioned credit limits In order to overcome the situation, the agencies were authorised to extend a loan assistance up to a maximum of Rs 10 lakhs for each Agency, to deserving Central Cooperative Banks, on the recommendations of the Registrar of Cooperative Societies The loan was for a period of three years

and was to be returned in three equated instalments. In case of two central cooperative banks requiring such assistance in one project area, it was the Agency's discretion to divide the total amount between the banks.

iii) *Staff Subsidy to Cooperatives* For improving the staff competency in the cooperative societies, primary special societies, land development banks, etc it was decided that the Agency would provide the cost of extra staff employed by these institutions for project works. The above assistance from the Agency was to be on a tapering pattern, *i.e.*, 100 per cent in the first year, 66⅔ per cent in the second year and 33⅓ per cent in the third year and nil thereafter

iv) *Share Capital Contributions* To encourage the identified farmers to become members of cooperatives. the agencies were authorised to grant share capital loan of Rs 40 to each identified farmer for purchasing 4 shares of the society.

v) *Subsidies* One of the problems realised by the All India Rural Credit Review Committee was that the credit institutions might be reluctant to extend liberal loans to weaker sections in view of their low credit worthiness and consequent high risk of loaning To overcome this, the Committee suggested steps like provision of risk fund through cooperative credit institutions to cover a part of the loans due to occurrence of bad debts, and staff subsidy to help the cooperative credit institutions to appoint additional staff for effective supervision of credit, which would in turn ensure appropriate use of loan and subsequently result in higher repayment

However, when the programmes were formulated, the Government of India also felt that sometimes there may be gaps in the credit worthiness of the cultivator which could not be wholly covered by the risk fund provided to the cooperatives, and even if the credit agencies agree to finance them, there may be some borrowers for whom the burden of the loan would be too heavy and that they may not be able to bear the total load of the debt. It was felt that in such cases, it may be necessary to give a subsidy on the total credit advanced to a beneficiary. Therefore, it was suggested that the Agencies may give subsidy in very exceptional cases to really deserving candidates. The subsidies were generally be granted on capital investments. The scale of subsidies was 25 per cent to small farmers and 33⅓ per cent to marginal farmers and agricultural labourers

Although initially, the subsidies were expected to be granted only to the really deserving candidates under special circumstances, and also that the scales of subsidy were suggested only as maximum limits of subisdy to be given, over the years, grant of subsidies for all loans disbursed under SFDA/MFAL become widely prevalent Thus, these programmes have now become a programme of subsidies for different kinds of capital investment, which was the very image that was sought to be avoided by the policy-

makers The pattern of subsidies has become so popular that grant of 25 per cent subsidy to small farmers and 33⅓ per cent to marginal farmers has come to be known as the "SFDA pattern of subsidies" and is being recommended for other programmes like the DPAP, IARD, etc

vi) Coordination Since the programmes are to be implemented by the existing developmental and financial institutions, coordination was of paramount importance With this end in view, the composition of the Agency was kept broad-based so as to include representatives of all the developmental organisations at the basic level At the State level, Coordination Committees were constituted in every state to review and analyse all the projects in each state, to identify bottlenecks and suggest modifications if any, and in general, ensure proper coordination of the different departments in the programmes The Committee was set up under the Chairmanship of the Chief Secratary/Development Commissioner/Agricultural Production Commissioner, with the representatives of financing institutions, the agriculture department and other development departments.

Assessment of Programme

Having looked at the problems of these target groups and the programmes and procedures evolved to tackle them, this section attempts to take stock of their performance Let us first see what some of the physical indicators of achievement reveal, as available from official documents Tables 8, 9 and 10 present the data in this respect. As Table 8[10] indicates, the total amount released by Government of India to the Agencies since inception is Rs 17026 lakhs out of which Rs 17015 lakhs have been utilised. Thus taking expenditure as the criterion the achievment is more than 96 per cent. However, there exists some variation between states in this regard, the percentage varying between 87 to 118. The average amount utilised in each state varies more widely, from the lowest figures of Rs 29 lakhs in Sikkim and Rs 54 lakhs in Bihar to Rs 211 lakhs in Haryana and Rs 335 lakhs in Nagaland An agency-wise analysis would, no doubt, reveal wider variations However that is beyond the scope of this paper

Mobilisation of credit is the major plank of the programme We find in this respect (Table 9) [11] that the tempo of medium and long-term loan disbursement both by credit agencies and commercial banks increased in the Fifth Plan period, as compared to the earlier period However, the total per capita disbursement of MT/LT loans from both the agencies since inception is only about Rs 490. Whether an average per beneficiary capital investment loan of this magnitude can be expected to yield sufficient return (even when supplemented with short-term input loans and other help) to enable the small and marginal farmers and agricultural labourers to rise above the poverty line and to make his enterprise economically viable and self-sustaining is a question that merits further study.

Table 8 : Amount Disbursed by Government of India and the Amount Utilised by Agencies
(Up to November, 1978)

(*Rupees in lakhs*)

S No	State/Union Territories	Amount released	Amount Utilised	Percentage of amount utilised to the amount released	No. of Projects	Mean amount utilised per project
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Andhra Pradesh	1490 18	1522 70	102	15	101 51
2.	Assam	287 78	258 11	90	4	64 53
3.	Bihar	1242.10	1199 65	96	22	54 53
4	Gujarat	947 39	950 13	100	6	158 35
5	Haryana	731 41	633 66	87	3	211 22
6.	Himachal Pradesh	516 81	503 90	98	3	167 97
7.	Jammu & Kashmir	293 42	320.10	109	4	80 02
8	Karnataka	538 98	540 27	100	8	67 53
9	Kerala	645 06	604 97	94	4	151 24
10.	Madhya Pradesh	1077.20	1145 54	106	12	95 46
11.	Maharashtra	1062.73	931.49	91	13	71 65
12.	Manipur	102 31	106 01	104	1	106 04
13.	Meghalaya	185 45	182.51	98	2	91 25
14.	Nagaland	331.96	335 05	101	1	335 05
15	Orissa	1074 04	1147.60	107	7	163 94
16.	Punjab	784 27	806 44	103	5	161 28
17.	Rajasthan	781 61	806.13	103	16	134.35
18.	Tamil Nadu	1335.85	1333.21	100	12	111 10
19.	Tripura	79.38	86.66	109	1	86.66

20.	Uttar Pradesh	2399 45	2520 18	105	26	96.93
21	West Bengal	819 76	755.10	92	9	83 90
22.	Delhi	79 08	93 40	118	1	93 40
23	Goa, Daman & Diu	108 37	111 43	103	1	111 43
24	Pondicherry	98 13	92 41	94	1	92 41
25	Sikkim	33 28	29 05	87	1	29 05
	Grand Total	17026 00	17015 73	100	168	101.28

Source Government of India, Progress Report for Cabinet Secretariat in respect of SFDA (November, 1978) Scheme relating to Special Rural Development Programme, New Delhi, Deptt of Rural Development, Ministry of Agriculture and Irrigation, March, 1979 (vide File No CRT 23013/1/74–SFDA (P & E), pp 1–6

N B : The total figures are less than the corresponding figures given in Table 10 This is because the figures in this table are based on incomplete data in respect of some of the Agencies. These were revised and corrected in the Ministry's Annual Report from which Table 10 is derived.

Table 9 : Distribution of Loans by Cooperatives and Commercial Banks During IV and V Plans and Since Inception (Up to November, 1978)

(*Rupees in lakhs*)

Particulars	Loan disbursed up to the end of IV Plan	Per Capita loan assistance per beneficiary (No of beneficiaries = 16 43 lakhs)	Loan disbursed during V Plan (April–November, 1978)	Per Capita assistance per beneficiary (No of beneficiaries= 43 68 lakhs)	Total loans disbursed: Since inception	Total loans disbursed: Per capita disbursement since inception (No of beneficiaries= 60 11 lakhs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cooperatives						
Mid-term + Long-term loan	5135.07	312 54	14959.66	342 88	20094 73	334 30
Commercial Banks						
Term loan	1064.52	64 79	8279 44	189 55	9343 96	155 45
Total	6199 59	377.33	23239 10	532 03	29438.69	189 75

Source · Government of India, Annual Report 1978–79, New Delhi, Department of Rural Development, Ministry of Agriculture and Irrigation, 1979, p. 116.

Looking at the coverage of beneficiaries according to various schemes (Table 10)[12], besides improved agriculture, minor irrigation and distribution of milch cattle were the main programmes.

The total number of potential beneficiaries (Table 10) identified up to November, 1978[13] and the number covered under different programmes by March, 1978[14], reveal a 37 per cent coverage of identified potential beneficiaries However, this proportion is likely to be a slight overestimate as in several agencies the same person has been counted more than once if he has been given subsidy for more than one item, say, milch cattle and agricultural implements.

While the physical indicators adopted by the Government for monitoring the programme do reveal certain broad trends. there have been several attempts to assess the performance of the programmes by official and non-official agencies

Overall Assessment

An attempt has been made to summarise the results of the various elvaluation studies conducted by various institutions and organisations covering almost all the states in the country. In all the projects under report, both SFDAs and MFALs, evaluation studies were undertaken just after two/three years of their inception. The results contained in these reports reflect the conditions in the projects investigated at their respective reference periods which are given in the list of references as well as along with the reference numbers superscripted. All but two projects were investigated before 1975.

Identification of Target Groups

A wide deviation from the general limits of holding-size adopted by the government was observed in the study conducted by the Reserve Bank of India in 13 SFDAs in as many states [15]. At the minimum level, the norm adopted was 0 80 to 1 00 hectare for small farmers. The maximum level showed a variation between 1 20 hectare and as much as 12 hectares. But the majority of the agencies had a limit varying from 3 00 to 3 20 hectares. In case of marginal farmers, as revealed in the studies of Reserve Bank of India and Programme Evaluation Organisation, the minimum size of holding fixed was 0 40 hectare and the maximum from 1.00 to 4.00 hectares But in general it ranged from 1 00 to 2 00 hectares.[16,17]

The procedure followed in actual practice by the agencies as compared with that laid down by the government for identifying target groups needs a serious look. The base work of the task of identification proceeded on the basis of revenue records But in almost all the project areas the existing land records could hardly be useful for preparation of an accurate list of

Table 10 : Number of Beneficiaries Under Various Programmes of SFDA Projects During IV and V Plans Up to November, 1978 and Since Inception

(*Figures in lakhs*)

S No.	Programmes	Up to the end of IV Plan	Percentage to total since inception	Total during V Plan up to November, 1978	Percentage to total since inception	Total since inception
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	Minor Irrigation	1 72	24	5 44	76	7 16
2	Milch Cattle Programme	0 78	18	3 65	82	4 43
3.	Poultry	0.08	44	0 10	56	0 18
4.	Other Animal Husbandry Programmes	0 25	13	1 73	87	1.98
5	Rural Artisans Programme	0 02	33	0 04	67	0 06
6	Rural Works Programme	2 25	80	0 58	20	2 83
7	Improved Agriculture	11 27	22	39 80	78	51 07
	Total Number of beneficiaries	16 43		43 68		60 11 (up to March'78
	Number enrolled in cooperatives	19 56		51 34		70 90
	Total number identified	39 27		121 86		161 13
	Beneficiaries as percentage of total identified	42		36		37
	Amount Released by Government of India	4683 89		13002 81		17686 70
	Amount utilised by Agencies	4170 59		12882 97		17053 56

Source : Government of India, Annual Report, 1978–79, New Delhi, Ministry of Agriculture and Irrigation, Department of Rural Development, 1979, p. 116.

participants as they were not up-to-date Besides, some studies[18,19*] have revealed that land owned by farmers in other village/villages was not generally taken into account Programme Evaluation Organisation[20] and ASCI[21] report that VLWs or patwaris who were generally entrusted with the work of identification did not pay due attention/misused their discretionary power or could not overcome the influence of large landowners. As the identification was based on ownership holding, tenants were left out of the list in almost all the projects Some studies[22,23] indicate that test checks made by Block Development Officers and Extension Officers did not appear to have been effective in excluding persons with higher economic status from these categories Besides, the procedures for identification did not provide for the collection of data on all the necessary details of the farmers relevant to the determination of their economic status PEO[24] observes that a substantial number were identified wrongly as marginal farmers as they were found to be without any operational land On the other hand, as indicated by several studies,[25,26,27] in several districts, marginal farmers were identified as small farmers, the magnitude of which went up to 45 per cent of the total identified participants. Very little attention was paid to identification of agricultural labourers. In several projects, this group was not identified at all[28] However, factors responsible for low percentage of identification of target groups were (a) absence of clear understanding of the exact extent of the work to be done and at times, apathy of the staff engaged in this work, and (b) lack of precision in the definition of target groups. A resurvey of the existing situation by the Agency itself would considerably help, as in the initial stages such deficiencies would always occur.

Cooperative Credit

Enrolment in Cooperatives The performance of the agencies in bringing identified persons into the cooperative fold was not all encouraging In nearly 50 per cent of the SFDAs, half of the identified persons were not members of cooperatives The percentage varied from as low as 8,[29] to 98[30]

Participation in cooperatives by marginal farmers and agricultural labourers was slow. The Reserve Bank of India[31] has shown that in more than one-third of the districts, less than 25 per cent of the identified persons were enrolled as cooperative members. In Andhra Pradesh, one project has recorded that only 4 per cent of marginal farmers and agricultural labourers were enrolled as cooperative members

The main reasons for slow progress in enrolment as experienced by the studies were . (a) inadequate effort on the part of certain central cooperative banks, (b) indifference to the cultivators in view of their past experience, (c) Societies' apprehension about their creditworthiness, and

* The reference period for this study was not available

(d) lack of adequate publicity and absence of the list of identified farmers with the societies

The performance of cooperative credit agencies in generating loans to the members was not as bold as it could have been. The position was particularly bad in most of the erstwhile MFALs. A Reserve Bank of India study[32] reveals that in about 50 per cent of the central cooperative banks the amount of the loan shared by the small farmers to the total loan disbursed was below 20 per cent In one project of Maharashtra it was even 1.4 per cent. However, the hihgest proportion observed was 69 per cent[33]. While in case of MFAL, the share of members to the total credit, as reported by RBI's Study of MFALs[34] was less than 10 per cent in 11 central cooperative banks out of 19 operating in the selected districts

The central cooperative banks had availed of the concessions available to them either by way of share capital contribution, non-overdue cover, managerial subsidies or risk fund contributions, etc from the agencies. But this assistance extended by the agencies produced good results only in a few projects[35]. The overall ratio of the project expenditure on such assistance and cooperative loans generated as worked out by PEO[36] was 1.17 in SFDAs and 1 6 in MFALs. The project assistance has been least fruitful where the cooperative movement was weak, as in Assam [37]

The factors mainly responsible for poor performance of cooperatives were (a) inadequate development of cooperative infrastucture, (b) weak-loaning capacity of some cooperatives due to heavy overdues; and (c) procedural difficulties in granting loans.

As revealed by the evaluation studies, agricultural labourers were non-receipients of their credit requirements. The Programme Evaluation Organisation has observed that of the total loan diverted to SFDA and MFAL the amount used to benefit agriculture labourers was very negligible (one per cent) Of the amount advanced, the share of cooperative banks was very insignificant In several project areas, agricultural labourers had no access to cooperative credit

Programme and Performance

Intensive Agriculture. The agencies generally depended on the field-level organisation of state governments which were inadequate to cope with the task The shortcomings of the supply system were: (i) inadequate sale points, (ii) multiplicity of retail depots, (iii) bottlenecks in transportation, and (iv) inadequate extension service and godown facilities.

The response of marginal farmers to technological opportunities was found encouraging in some districts, where the outlay on improved inputs was sizeable even without subsidy.[38]

There has not been a major shift in the cropping pattern in most of the project areas. Not enough efforts were made by the agencies to prepare well-suited crop rotations and pursuade farmers so adopt them

Minor Irrigation The achievements of various agencies with regard to targets in this respect varied considerably starting right from below 10 per cent to above cent per cent, though the achievements of most of the agencies ranged between 26and75 per cent[39,40,41,42,43,44]. The programmes did not make much headway where: (*i*) the farms were highly fragmented, (*ii*) tenant farmers failed to obtain investment credit, (*iii*) and clearance from groundwater department was not forthcoming, and (*iv*) physical constraints like hilly terrains. low water table, *etc.*

Dairying. Though the programme of supply of milch cattle had been taken up by all the agencies, it was of significance in only a few project areas. Relatively, the performance of SFDA was bettter than those of MFALs. As reported by several studies, [45,46,47] most of the SFDAs achieved more than 50 per cent of their target, but, the situation with MFAL programme was not as encouraging.

Some of the problems often faced by the project agencies were inadequate marketing facilities. high cost and non-availability of cattle feed, absence of breeding facilities, unsatisfactory health cover. non-availability of high-yielding milch cattle and lack of coordination with the programmes of the Animal Husbandry Department of the state governments. In spite of these handicaps, dairying emerged as one of the most successful components of the programmes

Poultry. With a few exceptions, all the agencies introduced poultry schemes But only in a very few project areas did the scheme made satisfactory progress. The performance of SFDA in this respect was relatively better than MFAL. As revealed in the Reserve Bank of India Study,[48] the scheme became more acceptable to participants were poultry was already a popular occupation. However, the main factors for slow progress as identified were: (i) high price of feed not compensated by reasonable price for eggs. (ii) non-availability of the requisite breeds; (iii) inadequate marketing arrangements; (iv) improper selection of beneficiaries, and (v) lack of veterinary aid resulting in a high mortality rate

Piggery, Sheep and Goat Rearing The participation rate in these programmes was extremely low Moreover, only in few projects these schemes were introduced. In a few projects the piggery scheme failed due to averse attitude of participants to this occupation, high cost of feed and lack of good market. [49,50]. Sheep-rearing was quite popular in some areas due to availability of plenty of grazing fields and consequent lower cost in maintenance.[51] On the other hand, in several projects the main reason for the scucess of the scheme was selection of proper breed for supply.[52] The per-

formance was particularly poor in the case of goat rearing. Heavy casualties in the absence of proper health cover caused a great set-back to the programme and losses to the beneficiaries[63,64]

However, like poultry, piggery and sheep rearing have chances of success in areas where such occupations are traditionally followed. But, the RBI[65] has reported that commercial banks had shown interest to finance such schemes only in those areas where recovery of loans was linked with organised market arrangements.

Community Programmes. Community programmes relate to the construction of godown and market yards, community wells and devices for lift irrigation, provision of custom services to the farmers and other rural works programme designed to generate employment opportunities for marginal farmers and agricultural labourers during slack seasons

In most of the districts, the scheme for sinking community wells was introduced much latter than other schemes, and consequently, the progress in this respect was limited In most of the project areas, participants were given facilities at concessional rates. However, the RBI[66] has observed that such schemes showed a promise of success where a concerted approach was made by the agency, the Minor Irrigation Department, the Cooperation Department, and the Land Development Banks.

The spread of the progress of Rural Works Programme was highly uneven despite the fact that the entire expenditure was met from the Agency's funds. In some agencies, emphasis was placed on community programmes even to the neglect of other important subsidiary occupations. Road construction and minor irrigation were most common items in this programme A complete picture of the agricultural labourers or marginal farmers employed in such programmes was not available. However, as observed by the Programme Evaluation organisation[67] the percentage of identified agricultural labourers provided employment under this scheme ranged from 0.4 to 19.0 and for marginal farmers from 0 2 to 6 2.

Economic Impact of the Programmes

Minor Irrigation Programmes. Some studies have also attempted to analyse the impact, if any, created on the enterprises of the clientele in economic terms like increase in production, profits, etc. of the different schemes for intensification of agriculture. The major contribution was generally found to be in the area of minor irrigation and use of improved farm technology, like high-yielding varieties and high value crops. The Agro-Economic Research Centre, University of Delhi,[68] in its study in Haryana has revealed that the net income per hectare for beneficiaries increased to Rs. 1687 which was 19 per cent higher than that for non-beneficiaries. In another study in Karnataka,[69] the increase compared with pre-SFDA stage was 12 per cent for marginal farmers and 39 per cent for small farmers

The cost-benefit ratio of minor irrigation schemes was computed for one SFDA, it was found to be 1.79 which was even higher than that for large farmers.[60]

PEO[61] indicates that the overall average net income generated by irrigation schemes was Rs. 1871 in SFDA areas and Rs 994 in MFAL areas

The impact of irrigation schemes thus, seems to be greater on small farmers rather than marginal farmers.

Animal Husbandry Programmes. Wherever implemented effectively, these seem to have brought good returns to the beneficiaries. The study conducted by the PEO reveals that the overall net increase in income from dairying was Rs 787 in SFDAs and Rs 884 in MFALs. In most of the other studies, however, the difference between SFDA and MFAL in respect of income from dairying was not significant In most of the projects (both SFDAs and MFALs) studied, the income from dairying varied from Rs. 400 to Rs. 1,000 per household Among SFDAs the highest was Rs 4,125[62] and among MFALs it was Rs 3,109[63].

Performance of poultry farming was quite insignificant in most of the districts

Sheep rearing which requires meagre operational expenditure gave an additional income ranging from Rs. 210 to Rs 1,600 as reported by PEO[64]

The rural works programme was taken up in all the MFALs and in few SFDAs. But the performance was generally very poor PEO[65] has shown that the average number of days of employment of participants in the programme was only 10 per year in MFALs and 18 in the SFDAs. Consequently, very few projects could generate any significant additional income to beneficiaries. Only in 14 per cent of the projects the income of beneficiaries from such programmes exceeded Rs 300 during the entire period, *i e* , up to 1973-74

Not much information is available on the change in employment status of marginal farmers and agricultural labourers under various programmes in the project areas It was brought out in the PEO[66] study that the rural works progromme taken up in 19 project areas, generated over 24 lakhs man-days of employment benefiting 58,614 agricultural labourers and marginal farmers who accounted for nearly 2 per cent of their estimated total population RBI[67] reported that though out of 10 MFAL projects in as many as 7 project areas agricultural labour households had more number of working days in agricultural pursuits than the non-beneficiary householods the increase was very marginal. Only in one district, reported by PEO[68] an increase of 125 days was observed. In another MFAL district, on an

average, every worker gained additional employment for about 14 days per month[69]

Conclusions : Lessons for the Sixth Plan

The conclusions drawn from the evaluation studies, do high light the strength and weaknesses of the programmes so far These are important learning experiences for planners and policymakers which should pave the way for more realistic programme planning and administration in future.

One major lesson that can be drawn from past experience with SFDA is that the problems of these sections of villagers are quite complex and these need attention in much greater detail and on a much more long-term basis than has been attempted by the SFDA's A thorough analysis of the eligibility, needs, constraints and assistance on a long-term basis, adequate both in quantity and in terms of relevance to the needs and problems, is required, if the goal is to really help small farmers make their units economically viable and self-supporting. Obviously, this cannot be done by a small group of 3-4 officers for 50,000 people within a span of 5 years. A much more concerted approach is needed

The second major lesson that emerges is regarding the yardsticks for measurement of programme performance. The indicators used in this respect have all been statistical in dices like the number of potential beneficiaries identified, number covered under some subsidy scheme, amount spent, number of equipments distributed, etc While all these are essential for overall monitoring purposes, these are at best only indirect indicators and are not necessarily correlated with incremental income accruing to the 'beneficiaries'. In the present system of monitoring of SFDA, there is no reliable indicator which could tell us how many of the beneficiary families have really been helped to become economically viable.

Another imrortant lesson was that the programme which was primarily addressed to help the weakest, tended, within the general frame of definition of its clientele, to help the relatively better off among the small and marginal farmers and agricultural labourers.

It is heartening to note that the new Integrated Rural Development Programme has sought to utilise these experiences and correct the imbalances and aberrations. Thus, for instance, the IRD programme envisages a much smaller number of beneficiaries (300 per block) with a much higher per capita allocation The IRD programme also intends to suitably modify its approach towards monitoring to "specifically indicate the progress achieved in making a certain number of families viable ..." The programme also seeks to adopt the 'Antyodaya' approach, and begin its coverage from the poorest among the poor, gradually working its way upwards. These changes are being sought to be introduced even in SFDA programmes

which have been allowed to continue during 1979–80 and possibly may continue afterwards too.

The future in respect of development of small farmers would thus depend largely on the extent to which the lessons of the past 9 years are used meaningfully in giving a new orientation to the programme, without losing sight of the ultimate goal of motivating and helping the clientele to intensify and diversify their enterprises so as to move unfailingly towards economic self-sufficiency.

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DEVELOPMENT OF DROUGHT-PRONE AREAS

N K Jaiswal

Introduction

Droughts and famines have been a way of life of people in many parts of our country According to an official estimate[1] 19 per cent of the total area of the country accounting for 12 per cent of the population is chronically subjected to drought causing miseries to both human and animal population. The low and unstable agricultural productivity in these areas was a major factor leading to regional imbalances These areas still continue to be a source of strain on the financial resources of the nation as the governments have to spend huge sums of money in the event of occurrence of droughts to provide relief to the affected population.

At the all-India level, the expenditure on drought relief was as high as Rs 722 crores[2] including Rs 197 crores from the state governments, Rs 203 crores from the central government and Rs. 317 crores from International Aid Agencies during 1965–67. In 1972–73 alone, the estimated expenditure on relief measures was Rs. 370 crores[3]

The Government of India recognised the need for long-term solution to this problem of drought and launched the Drought-prone Areas Programme (DPAP) in the Fifth Five-year Plan with the basic objectives of (*i*) Reducing severity of the impact of drought , (*ii*) Stabilising income of the people, particularly the weaker sections of the society, and *(iii)* Restoration of ecological balance.

In this paper, before describing the strategy of DPAP and its performance in the districts covered by this programme, an attempt has been made to review briefly the droughts and famines in India, measures undertaken to provide relief to the people and recommendations made in the past for solving the problem of drought. This background information is followed by details regarding Drought-prone Areas Programme such as coverage, content, organisation, achievements and critical analysis of its performance and strategy in the Sixth Five-year Plan.

Droughts during 19th Century and Early 20th Century

Famines resulting in scarcity of food have been a recurring feature of the Indian agricultural economy for centuries[4] Except for a very few pockets. there were no areas which had not been affected at one time or the other by famines which continued to recur in every quinquennium until 1923–24 The most important cause of these famines was drought

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Measures to reduce calamitous affliction of the population due to famines has a history of more than a hundred years Commissions of Enquiry[5] set up in 1880. 1898, 1901 and 1943 examined the causes of famines and recommended measures in the form of famine code to be adopted when scarcity verging on famine was imminent and also when the actual contingency arose They advocated extension of railways, irrigation works, suspension and remission of land revenue, grant of loans under the Land Development Acts, exemption from enhancement of land revenue on permanent improvement, cash advances for rural poor to avoid death by starvation during the famine period Indebtedness of cultivators was considered as one of the chief causes of privation.

Droughts during the Last Two Decades

It was only four decades after the severe drought of 1923--24 that India suffered widespread drought for two successive years in 1965--66 and 1966--67 which caused severe set-backs to India's economy. The drought of 1965--66 had affected 47 6 million people in 125 districts over eight states. In 1966--67, the drought occurred in the populous northern states of Bihar, Uttar Pradesh and parts of West Bengal It occurred again in the next year in parts of Rajasthan, Gujarat and Madhya Pradesh causing distress to a population of 102. 6 million spread over 157 districts[6].

The main cause of these droughts was acute deficiency of rainfall from South-West monsoon varying from 21 to 55 per cent of the normal leading to a shortfall in food production as evident from total production of 72 6 and 75 million tonnes in 1965-66 and 1966-67, respectively, as compared with 89 9 million tonnes in 1964-65.

The percentage of rural poor below the minimum level of living went up from 18 in 1960-61 to 63 in 1966-67 due principally to these two droughts

Only five years after the severe and widespread drought of 1966-67, India again experienced one of the worst droughts in 1972-73 This was characterised by failure of pre-monsoon rains and prolonged dry spell from middle July to first week of August in West Bengal Orissa and Bihar The rainfall deficiency varied from 30 to 53 per cent of the normal. Out of the 340 districts in India, 227 were affected causing hardship to nearly 20 crores of population The production of foodgrains came down to 95 2 million tonnes from 108 million tonnes in the year 1971-72

Relief Measures

Drought of 1965-67. The central government took initiative and made 61 and 43 per cent contributions to the total expenditure made by the states on relief measures The Centre also helped by supplying foodgrains, strengthening of state administrative machinery and influenced the states to develop a strategy comprising relief works without ceiling on expenditure, focussing

on local and small-scale works, recording of completed productive works, preparation of master plans for minor and medium irrigation, soil conservation works, provision of gratuitous relief, gift grains, support for state schemes on supply of drinking water, cattle preservation and nutrition programmes Rapid extension of public distribution system with standard rationing and flying squads to curb malpractices in rationing, wages to labourers, reinforcement of the feeding programme with supplies of milk powder received by way of gift

Drought of 1972–73 As in the case of droughts of 1965–67, a number of relief measures were undertaken by the government. The Emergency Agricultural Production Programme was taken up with massive financial assistance to the states for increasing production of rabi and summer crops. No outside help was sought by the government for relieving distress of the people in view of the policy of self-reliance Voluntary agencies were also involved in providing relief to the people in several ways

Rural Works Programme in the Fourth Plan

The origin of the Drought-prone Areas Programme can be traced to the Rural Works Programmes which was started in 1970–71 in the Fourth Five-year Plan in areas identified as prone to drought on the basis of objective criteria* Labour intensive schemes such as medium and minor irrigation, road construction, soil conservation and afforestation were taken up under this programme An expenditure of about Rs. 92 crores was incurred creating 1500 lakh man-days of employment provided irrigation to 1.64 lakh hactares, covered 4 6 lakh hactares under soil conservation, brought one lakh hactares under afforestation schemes and provided for the construction of 9000 kms of roads[7]

Shortcomings in Relief Measures

The Task force on Integrated Development of Drought-prone Areas observed that planning for relief work was based on inadequate information and snap judgements Due to the political pressure, the State machinery had to somehow spend allotted amounts irrespective of the merits of schemes without monitoring or field supervision of relief expenditure resulting in many kinds of malpractices and misuse of funds. As the central assistance was confined to the wage component of the relief project, in many cases the relief works were left incomplete when funds required for materials were not provided by the States. Such *ad hoc* relief work did not help to solve the chronic problems of drought-prone areas. Hence, the need for development of drought-prone areas was strongly felt.

* Details of identification of these areas are described under the section on Identification of Drought-prone Areas

Development of Drought-prone Areas : Recommendations made in the Past

The recommendations of various Famine Commissions were mainly confined to relief measures. They have, however, suggested extension of irrigation and railways to mitigate the effects of droughts.

It was only after Independence that some long-term strategies were suggested by Committees appointed by the State Governments for the development of drought-prone areas. The recommendations were too general and were not qualitatively different from the measures required for the development of districts free from droughts.[8]

The Ministry of Agriculture prepared an outline of the draft plan for the development of certain regions of Andhra Pradesh, Mysore and Maharashtra which were subject to chronic drought Thus, it was only in 1961 that 'famine' was given wider connotation by bringing in the concept of chronically drought-affected areas, which covered not only those areas where famine was endemic but also certain areas where the rainfall was low and the general geographic and agro-climatic conditions were such that the slightest unfavourable tilt in the natural balance would push these areas in the direction of famine [9]

The need for evolving a long-term strategy for the development of drought-prone areas was felt only after the droughts of 1965–67. The efforts made by various agencies are summarised below.

The agricultural scientists[10] met in Delhi in 1969 and examined the problems in the development of DP areas They observed that research for improving the production potential of drought-prone areas was inadequate. They, therefore, recommended large-scale inter disciplinary efforts, all-India Coordinated research projects to study the problems of DP areas, meteorological investigations to identify the causes of abnormal behaviour of monsoons, pilot studies on aerial application of fertilisers and pesticides, and integrated surveys of DP areas to make an overall assessment of various natural resources Development of animal husbandry was to be emphasised in view of the precarious nature of crop farming The symposium also emphasised the need for a package approach to the adoption of technology, provision of services and extension work.

The All-India Seminar of Agricultural Economists[11] discussed the problems of dry-farming in drought-prone areas in 1971. They mainly emphasised the need for undertaking studies on the economics of soil and moisture conservation measures, different farming systems, credit and insurance schemes and farm mechanisation in drought-prone areas Besides, the Seminar also emphasised the need for interdisciplinary efforts, area development approach, adaptive research and studies on problems in development and implementation of dryland farming strategy.

The recommendations of the Second Irrigation Commission (1969)[12] who also identified drought-prone areas were confined to development and management of irrigation resources.

The Task Force on Integrated Agricultural Development of drought-prone areas[13] pointed out that the main reason for the creation of deserts and drought-prone areas was ecological imbalance in these areas Hence, they recommended restoration of ecological balance as the long term and fundamental objective of the drought-prone areas programme To achieve this objective, they made wide ranging recommendations which are described in detail under the strategy of Drought-prone Areas Programme.

Identification of Drought-prone Areas

Drought in India has been localised in some years and quite widespread in other years. For example, during 1977, most parts of India had fairly good rainfall and drought was localised in only one or two pockets. But, out of 340 districts of India, 156 were affected by drought in 1966-67 and 227 during 1972-73. It has been observed that barring Assam, the rest of the country is subjected to drought once in three, four or five years. According to this observation, while the entire country would be considered as prone to drought at varying intervals, there are certain areas which are chronically affected by drought. In addition to scarcity of rainfall in these areas frequent conditions of drought result from the interaction of imbalances created by a number of factors such as precipitation, soil characteristics, temperature, wind velocity and sunshine. Consequently, the areas where not only rainfall but also the other climatic and physical conditions create an unstable agriculture, qualify for being classed as drought-prone.

The Government of India undertook identification of drought-prone areas for initiating a programme of rural works A Committee of officials was appointed in 1970 to select such areas based on objective criteria like incidence of rainfall over period of time, extent of irrgated area in the district, chronic liability of drought, etc. Taking into account the recommendations of this Committee and other relevant factors, including the proposals that had been sent up by the State Governments, the Government of India eventually identified 54 territorial units as representing 54 drought-prone areas. Substantively, this represented 54 districts and contiguous areas of another 20 districts. In other words, 74 districts either partly or wholly, were identified as representing drought-prone areas

In 1972, the Irrigation Commission also studied the problem of drought-prone areas. The Commission identified drought-prone areas as those with less than 30 per cent of cropped area under irrigation

While there is a broad measure of compatibility between the areas identified by the Government of India in 1970 and the areas recommended by the Irrigation Commission, there are certain variations. For instance,

while some of the districts of West Bengal, Bihar and Uttar Pradesh figured in the list drawn up by the Government of India, these districts have been excluded by the Irrigation Commission.

The Task Force on Integrated Agricultural Development of Drought-prone Areas analysed the differences between the two recommendations of the Committee of Officials appointed in 1970 and of the Irrigation Commission and came to the conclusion that the areas identified as drought-prone areas by the Committee of Officials in the Fourth Plan may continue to be categorised as drought-prone during the Fifth Plan. Accordingly, the Drought-prone Area Programme was launched in the following 74 districts in 13 states.

I *Andhra Pradesh* (7 Districts):

(1) Anantapur (100%) (2) Kurnool (100%) (3) Mahaboobnagar (87%) (4) Cuddapah (89 6%) (5) Prakasam (10 8%) (6) Chittoor (74%) (7) Nalgonda (14%)

II *Bihar* (4 Districts):

(1) Palamau (100%) (2) Rohtas (45 3%) (3) Nowada (20%) (4) Monghyr (34%)

III *Gujarat* (10 Districts):

(1) Kutch (38%) (2) Surendernagar (87%) (3) Banaskantha (57%) (4) Ahmedabad (51%) (5) Jamnagar (25%) (6) Amreli (41%) (7) Rajkot (21%) (8) Mehsana (11%) (9) Bhavnagar (8%) (10) Panchamahal (75%)

IV *Haryana* (3 Districts):

(1) Mohindergarh (100%) (2) Hissar (29%) (3) Rohtak (25%)

V *Jammu & Kashmir* (2 Districts):

(1) Doda (100% (2) Udhampur (N A.)

VI *Karnataka* (10 Districts):

(1) Bijapur (62%) (2) Chitradurga (61%) (3) Gulbarga (35%) (4) Kolar (62%) (5) Dharwar (34%) (6) Tumkur (43%) (7) Raichur (28%) (8) Chickmagalur (19%) (9) Bellary (10%) (10) Belgaum (42%)

VII *Maharashtra* (6 Districts):

(1) Sholapur (86%) (2) Ahmednagar (53%) (3) Sangli (36%) (4) Nasik (48%) (5) Satara (43%) (6) Poona (44%)

VIII *Madhya Pradesh* (6 Districts):

(1) Betul (100%) (2) Jhabua (100%) (3) Dhar (65%) (4) Khargon (25%) (5) Sidhi (100%) (6) Shahadal (25%)

Figures in parantheses are percentages of area covered under DPAP in the respective districts.

IX *Orissa* (2 Districts).

(1) Boudh Phulbani (88%) (2) Kalahandi (61%)

X *Rajasthan* (13 Districts):

(1) Jaisalmer (100%) (2) Bikaner (100%) (3) Barmer (100%) (4) Jodhpur (100%) (5) Chun (100%) (6) Nagaur (100%) (7) Jalore (100%) (8) Pali (100%) (9) Udaipur (18%) (10) Jhunjhure (51%) (11) Ajmer (20%) (12) Banswara (100%) (13) Durgapur (100%)

XI *Tamil Nadu* (2 Districts)

(1) Ramanathapuram (100%) (2) Dharmapuri (100%)

XII *Uttar Pradesh* (6 Districts):

(1) Banda (63%) (2) Hamirpur (55%) (3) Allahabad (41%) (4) Jalaun (49%) (5) Varanasi (33%) (6) Mirzapur (100%)

XIII *West Bengal* (3 Districts):

(1) Purulia (100%) (2) Midnapur (23%) (3) Bankura (29%)

Characteristics of Drought-prone Areas

The Ministry of Agriculture categorised the drought-prone districts on the basis of annual rainfall into *(1)* Arid — Districts with rainfall up to 375 mm, *(2)* Semi-Arid — Districts with rainfall from 375 mm to 750 mm; *(3)* Sub-Humid — Districts with rainfall ranging from 750 mm to 1125 mm; and *(4)* Humid — Districts with rainfall above 1125 mm. A brief description of the areas falling in each category is given below.

Arid Areas The arid zone is mostly compact region covering the western part of Rajasthan and adjoining districts of Gujarat and Haryana It comprised five districts of Rajasthan, three districts in Haryana and one in Gujarat.

Scanty and erratic rainfall, high temperature, dessert soil, desicating winds, evaporation exceeding precipitation, insufficient moisture to support vegetation, absence of perennial rivers and deep and salty groundwater, etc represent the resource situation of the region. High erosion, shifting of sand dunes and deposition of sand on roads, cultivated land, etc. add to the adverseness of the resource endowments of this area. Sizeably large parts of this region constitute the uncultivable waste lands, barren and overgrazed range lands, scanty and sparse forests and only a small, scattered area of the land is under cultivation.

Because of extremely low rainfall, the main occupation of rural people is cattle, sheep and goat rearing These areas have notable breeds of cattle. Pasture land which varies from 1.25 in Bikaner to 7.20 per cent in Barmer, as a percentage of the reporting area is getting eroded slowly, and consequently there is shortage of fodder during lean years Nomadic cattle breeders are, therefore, found in this area

The percentage of net area sown is very low in some districts such as Jaisalmer (less than 1 per cent), Kutch (11%), Bikaner and Barmer (16%) whereas it is higher than 45 per cent in Jodhpur, Churu and Mohindergarh. The marginal lands under pastures were converted into cropped areas resulting in drastic reduction of grazing areas

The percentage of irrigated area varies from less than one per cent in Bikaner and Churu (Rajasthan) to 12 per cent in Kutch (Gujarat) whereas the all-India average is 23 per cent. There is not much scope for large-scale extension of assured irrigation facilities in arid districts

The traditionally grown crops in these areas are bajra, jowar and pulses; cotton is only grown in Kutch The yield rates of these crops are very low compared with the all-India average For example, while the average per hectare yields of bajra in Bikaner, Jaisalmer and Churu are, respectively, 155 kgs, 180 kgs, and 252 kgs, the corresponding figures for more fertile areas in the country is 620 kgs. This is also true of jowar, gram and cotton.

These areas are sparsely populated, the density of population per sq. km. varying from four (Jaisalmer) to 52 (Churu) Mohindergarh is an exception with a population density of 197 persons

The existing infrastructure in this area is poor The length of surfaced road varies from 3 to 33 kms per thousand sq kms. with the exception of Mohindergarh where it is 84. On the other hand, the all-India average of *surfaced roads is 98 6 kilometres The percentage of villages and towns* electrified varies from less than one per cent to 11 per cent in these districts as against the all-India average of 16 per cent

Semi-Arid Areas Peninsular India comprising Maharashtra, Karnataka, Andhra Pradesh and Tamil Nadu account for 59 per cent of the semi-arid area Semi-arid area in North India is in the form of strip to the east of the arid zone and account for 41 per cent of the semi-arid area

The districts covered from this area were five from Andhra Pradesh, eight from Gujarat, nine from Karnataka, three from Maharashtra, six from Rajasthan and two from Jammu and Kashmir.

Medium and deep black, red, grey, brown soil and alluvial soil are the main soil types of the arid zone The nature of the ecological imbalance is relatively less pronounced in the semi-arid areas than that of the arid areas Erratic distribution of rainfall, high run off, soil erosion, degradation of plant and vegetative cover, low productivity of land, water and animal resources are the characteristic features of the semi-arid areas The relatively higher level of participation and greater feasibility of crop husbandry call for a distinct type of strategy *for the development of these areas.*

The main occupation of the rural people is crop farming. In most of the districts the percentage of net area sown is substantially higher than the

all-India average of 45 per cent However, in Doda district it is only 13 per cent, the bulk of the area being under forest

The cropping pattern varies considerably. Besides jowar and bajra as main crops, cash crops like groundnut and cotton are also important. The area under groundnut varies from 14 per cent in Kurnool to 45 per cent in Jamnagar. Cotton is grown in sizeable areas in Surendranagar (42 per cent) Rajkot (13 per cent) and Kurnool (11 per cent). Rice is also grown in 9 to 15 per cent of the area in the Rayalaseema and Karnataka districts. In Dharwar and Doda, wheat covers 9 to 13 per cent of the cropped area, respectively.

By and large, the yield levels of different crops in semi-arid districts are below the all-India average by 10 to 20 per cent. However, there are a few exceptions, the yeild levels of bajra and wheat in Jalore, groundnut in Jamnagar, jowar and bajra in Pali, Bijapur and Chitradurga, cotton in Surendranagar are more than 10 per cent higher than the all-India average. This is the most hopeful sign and it is expected that with better water management, these areas will move out of this category and may even be entirely rid of their disability. Sheep and goat rearing is common in the drought-prone districts of Rajasthan, Karnataka and Andhra Pradesh.

The percentage of villages electrified is fairly high in some of the districts: Sangli 58 per cent, Chitradurga 52 per cent, Surendranagar 48 per cent, Kurnool 44 per cent and Dharwar 42 per cent The length of surfaced roads per 1000 sq. kms is quite high in Sholapur (131 kms), Ahmednagar (145) Sangli (183) and Kolar (143). But in districts like Jalore (Rajashan) and Doda (Jammu and Kashmir) it is very low (7 and 17 kms.).

Sub-Humid Areas. There are 17 DPAP districts within the rainfall zone of 750 mm to 1125 mm. These are the districts where the new dryland farming technology is expected to yield the maxmum results. Of these districts, five are from Uttar Pradesh, four from Madhya Pradesh, two each from Rajasthan, Tamil Nadu, Maharashtra and Andhra Pradesh, and one each from Karnataka and Gujarat.

Though the rainfall is fairly good in these districts, drought condition is mainly due to failure of rainfall during critical periods of crop growth and low moisture retention capacity of the soils. Out of 19 districts, 13 districts have less than 20 per cent of their area under irrigation.

Five districts, *viz.*, Chittoor, Betul, Ramanathapuram, Varanasi and Jalaun have more than 30 per cent irrigated area which is higher than the all India average of 23 per cent. The frequency of drought in these districts is however very high (5 to 7 times in 10 years) as the sources of irrgation are not reliable. Supplies of groundwater are also limited.

The percentages of net area sown range from 31 per cent in Dungarpur of Rajasthan to 78 per cent in Jalaun District of Uttar Pradesh. The main food

crops are rice, wheat, jowar, bajra and maize Among the cash crops, groundnut is grown in most of the districts

Cotton is grown in Belgaum (9%) and Ramanathapuram (13%)

In most of the districts the yield of crops is below the all-India average. However, there are few districts which recorded comparatively higher yield rates. The yield of jower per hectare in Belgaum and Satara are 848 kgs. and 598 kgs respectively, as against the all-India average of 470 kgs. per hectare Similarly, the yield of wheat per hectare in Dungarpur is 1478 kgs. Rice in Chittoor district is 1579 kgs whereas the corresponding all-India average figures are 1299 and 1134, respectively.

Infrastructure development such as the length of surfaced road and level of electrification is quite low in the districts of Madhya Pradesh and Rajasthan. The districts of Nasik, Satara, Belgaum, Ramanathapuram, Varanasi and Allahabad are fairly well developed and are better organised as compared with other districts in the category

The hill regions like Panchamahal in Gujarat and Betul in Madhya Pradesh have a large tribal population.

Humid Areas The districts covered in these areas were four from Bihar, three from West Bengal, two each from Madhya Pradesh and Orissa and one each from Maharashtra and Uttar Pradesh. The rainfall in this tract varies from 1123 mm in Rohtas (Bihar) to 1597 mm in Boudh Phulbani (Orissa) According to the recommendations of the Irrigation Commission, out of 13 districts only a part of one district, *i e.*, Poona qualify to be included as a drought-prone area A note by the Ministry of Agriculture gives the following reasons for the inclusion of areas with such high rainfall as drought-prone districts In the districts of Bihar the main problem is failure of 'Hatia' rains which are crucial for rice crops In Kalahandi and Boudh Phulbani (Orissa) there is a variation in rainfall in different areas and in different years. Run-off is also quick because of hilly terrain Lack of adequate rainfall during the critical periods of crop growth leads to drought in the districts of West Bengal. In Poona district, out of the total area of 15 6 thousand square kms approximately 7 thousand sq kms is under rain shadow track

In spite of high rainfall the percentage of net area sown is below the all-India average in Mirzapur, Palamau, Sidhi. Kalahandi and Boudh Phulbani

Rice is the main crop in all the districts except Poona, where the main crops are jowar and bajra Because rice requires more water, any deviation from the normal rainfall or its distribution can lead to crop failures in the rice growing districts By and large, the yield levels of different crops in these districts are below the all-India average by 20 per cent or even more

The percentage of Rural Electrification is quite low in these districts except in Poona. The mileage of surfaced road per thousand sq kms. is quite high in Poona (168), Bankura (165) Midnapur (97) In the case of all other districts it is much lower than the all-India average.

The hill districts of Kalahandi, Boudh Phulbani and Palamau have a large tribal population presenting problems which need special attention in the formulation of overall policies for the development programmes in these areas.

DPAP IN THE FIFTH PLAN

Objectives and Programme Components

As indicated earlier, the Drought-prone Areas Programme in the Fifth Plan was initiated with two main objectives : (*a*) long-term development of the areas with a view to restoring ecological balance, and (*b*) short gestation programmes of development which will help in improving the lot of the community in general and the small and marginal farmers and agricultural labourers in particular The main elements of the strategy were: *(i)* Development and management of irrigation resources ; *(ii)* soil and moisture conservation and afforestation ; *(iii)* restructuring of cropping pattern and pasture development , *(iv)* changes in agronomic practices, *(v)* livestock development ; and *(vi)* development of small/marginal farmers and agricultural labour

An attempt has been made in the pages that follow to highlight the need for restoration of ecological balance in drought-prone areas

Restoration of Ecological Balance

There is historical evidence to show that the drought-prone areas were once blessed with productive agriculture and flourishing civilisation. However, with the evolution of Man, a process of persistent and serious interference with nature was initiated and continued in directly increasing proportions with the population, so as to satisfy the food and other needs For this purpose, man cleared forests and brought more and more land under the plough. The natural process of erosion of land which was otherwise slow was accelerated to ultimately lead to a point where it becomes unfit for raising crops in the absence of appropriate soil conservation measures The civilization in these areas disappeared due to the neglect of land resources. In the absence of vegetative cover, land got exposed to erosion by several agents leading to increase of dust particles in the air. Inadequate forests and vegetation in the area also led to higher temperature ultimately producing more and more arid conditions in the area It was estimated that in western Rajasthan the area under grazing had declined by 15 6 per cent during 1951–61 whereas the grazing animals increased by 53 per cent during the same period. This same trend of imbalance between livestock and grazing

land was a estimated to have continued during the period 1961-71, Due to the pressure of population, sizeable areas which were in the sixth and seventh categories of FAO's land capability classification and which were suitable only for conservation purposes, were also brought under crop farming despite the low per hectare yields from such lands

There is also evidence to show that the lack of ecological balance in the area as responsible for erratic and inadequate rainfall According to an estimate. the humidity in the air in some of the DP areas was as high as other areas with good and larger rainfall The mean precipitable water vapour in gms per cm^2 at Jodhpur was 5 6 in July and the corresponding values for Delhi, Nagpur, Bombay, Trivandrum were 6 1, 5.5, 6 2 and 4 6, respectively. Even then, Jodhpur did not receive rainfall as much as the others do This was to the presence of desert, lack of vegetation, and climate and presence of more dust in the air. It was, therefore, of utmost importance to undertake improvement of range lands, controlled grazing afforestation. shelter belts, windbreaks and stabilisation of shifting sand dunes for reversal of past trends in these areas. and make deliberate and deligent efforts to restore ecological balance

To achieve the objective of restoration of ecological balance, functional and spatial integration of the programme components mentioned in the preceding section were considered a must on watershed basis.

Watershed Approach. Development programmes were so far planned and implemented by taking district as a unit for planning and implementation The strategy under Drought-prone Areas Programme envisaged to make a significant departure from this practice by adopting watershed as the unit for planning and implementation Watershed is claimed as the most scientific unit for efficient management for land and water resources· Defined in most simple terms, watershed is an area of land that contributes runoff to a common point It is separated from adjoining areas by an elevated ridge line A land capability survey is undertaken to prepare a soil use map Other basic information must also be collected through hydrologic survey, vegetation survey, socio-economic survey and site specific surveys to fully ascertain the status of land and water resources of a watershed, and human and livestock pressures on them. According to the survey findings, areas suitable for afforestation are put under forest trees; areas suitable for pasture area earmarked for pasture development and areas suitable for crop farming are put under crops Besides, suitable soil and moisture conservation measures and water harvesting techniques are also to be employed for the purpose of successful crop production by adopting the latest dryland technology.

Watershed approach ensures planning on the basis of total available water resources, conjunctive use of surface and groundwater by allocating priority for a rational use of water. It also ensures preparation of a coordi-

nated plan Thus watershed planning held the promise of conservation of land and water resources and their optimum utilisation in reality. This task posed a big challenge for the planners and administrators of this programme

Development of Watershed involves complementary activities of different sectors. Some of the functions for management of watershed may be quite new and may demand additional responsibilities from the sectoral officers within the watershed boundaries. Therefore, watershed development may require a different system of management and administration than what is in operation in routine sectoral departments For effective development of watershed it is necessary that all the activities of different sectors like, forests, pasture, agriculture, soil conservation, etc. must be within the administrative control of one officer so that activities of different sectors are effectively interlinked This would also require preparation of case studies for cost estimate and budget for all the sectors of each watershed separately

Unless appropriate administrative and financial arrangements are made for each watershed or a group of sub-watersheds in contiguous areas it would not be possible to achieve the objective of restoration of ecological balance through the integrated development of watersheds

Programme Components

A brief description of different programme components to be implemented on watershed basis is given below

Development and Management of Irrigation Resources. Water is a limiting factor for crop production particularly in the arid and semi-arid areas The total available water is less and its distribution is uneven. As these areas do not have perennial rivers, there is hardly any possibility of major and medium irrigation works Hence, only small works such as tanks, bandharas and dug-wells are the important sources of irrigation. According to the Irrigation Commission, only 13 per cent of the cropped area in drought-prone districts was irrigated and the irrigated area was expected to go up to 19 per cent, with the completion of the projects under execution, leaving 81 per cent of the cropped area without irrigation

Hence, proper development and management of irrigation resources was considered a must for development of drought-prone district First, it involved increasing available water resources through improvements in existing irrigation works, expeditious completion of irrigation projects under execution of irrigation projects and investigation of further possibilities of increasing irrigation from both surface and groundwater sources by undertaking quick hydrological surveys in these areas.

Soil and Moisture Conservation and Afforestation Emphasis was to be placed on conservation of soil and moisture *in Situ* by following routine

soil conservation practices of levelling, furrowing, strip cropping, terracing contour bunding and incorporation of more organic matter in the soil All these soil conservation practices were contemplated for reducing the rate of run-off and erosion of the surface soil by improving percolation of rain-water deeper into the soil. In addition to this, the excess run-off water was to be collected in suitable structures constructed for this purpose at appropriate locations by undertaking planning and implementation of these practices on watershed basis. Use of different types of mulches to reduce evaporation losses from the surface of the soil was also aimed at

Afforestation Programmes are included in view of the reckless deforestation going on for centuries by cutting trees for timber and firewood. Forests are important for reducing soil erosion and prevent siltation of irrigation tanks and help in conservation of soil moisture Such protective influence of forests against erosion and degradation should be utilised in areas susceptible to them by suitably managing the existing forests and providing for their rehabilitation Hence it was envisaged under DPAP to take up programmes on rehabilitation of degraded forests, afforestation in Government wastelands and village common lands and canal bank plantations, tank foreshore plantations, farm forestry, etc.

Restructuring of Cropping Pattern. The strategy aimed at improvement of production during good rainfall years and minimisation of losses during bad weather years Hence, two types of codes, *viz.*, good weather code and bad weather code were recommended to achieve this purpose The former was to prescribe the improved dryland practices in the event of good monsoons whereas the latter was to come into operation when the weather turned aberrant In view of the frequent droughts and long dry spells in these areas, cropping pattern was to be restructured by introducing non-conventional drought-tolerant crops such as safflower, sunflower and castor, high-yielding, short duration and drought resistent varieties of millets The risks from droughts were to be further reduced by popularising suitable inter-cropping Use of crops with deep-root systems and low water requirements were to be utilised to tide over the dry spells

Improved Agronomic Practices In view of the complementary nature of the technological practices it was not considered sufficient to restructure the cropping pattern Suitable changes in the cropping pattern were to be reinforced by adoption of *improved agronomic practices,* such as use of chemical fertilisers, optimum plant population, effective weed and pest control, flexible sowing dates of crops to obtain optimum crop yields

Livestock and Pasture Development. While crop farming has a role to play in the development of drought-prone areas, its primary aim is questionable in view of its precarious nature due to erratic and inadequate monsoons. Hence, the strategy for development of arid and semi-arid areas was mainly built around animal husbandry which has an inbuilt superiority over crop

farming and is less influenced by the vagaries of the monsoon. Livestock development in conjunction with dairying was considered to offer a more stable base for improving the income of rural people, particularly the small and marginal farmers and agricultural labourers The national policy on development of these weaker sections dictates the development of livestock and dairying as a subsidiary occupations so that they are provided with supplementary income and employment

Development of pastures is a pre-requisite for successful animal husbandry programmes. Though these areas face acute shortage of fodder during the lean years, these areas do have sizeable pastures owned either by the government or the village community. These areas were to be used for pasture development by utilising latest grassland technology. A portion of these lands were to be used as a base for fodder banks and the programme supported by encouraging cultivation of fodder crops around sources of irrigation

With the development of pastures and forage crops, concerted efforts were to be made to improve production of milk in these areas through the related programmes of extension, breeding and animal health cover. Haryana, Rajasthan and Gujarat have reputed breeds of cattle It was intended to introduce exotic blood in areas having assured supplies of fodder Infrastructure was also to be built for supply of exotic semen in liquid form in these areas Many of the drought-prone areas also had considerable potential for development of sheep husbandry through improved feeding, health cover and breeding for good quality mutton and wool.

Development of Small and Marginal Farmers and Agricultural Labourers. As the weaker sections of the population in drought-prone areas suffer mostly in terms of scarcity conditions, it was important to enable them to improve their conditions by making special provisions in this area development programme. It was estimated that there are over five million small and marginal farmers' households and 3 5 million households of agricultural labourers. They were to be helped to take advantage of the technological practices by subsidising their expenditure on them, by providing subsidiary sources of incomes in the form of supply of milch animals, sheep, poultry units, etc.

Management Strategy. The Central Drought-prone Areas Programme Division in the Department of Rural Development, Ministry of Agriculture and Irrigation was the apex organisation which oversaw programme planning, implementation, monitoring and evaluation of the programme through out the country. Planning, monitoring and evaluation cells were also set up at the state level to perform similar functions in respect of this programme in the state

As the main elements of the strategy of integrated agricultural development concerned at least the departments of Agriculture, Forestry, Animal

Husbandry, Irrigation and Cooperation, the Government opted for an organisational innovation, Drought-prone Areas Development Authorities in the form of corporate bodies registered under the Societies Registration Act The Collector or the District Development Officer was to be the ex-officio chairman, and district level heads of departments and some non-officials are to be members of these agencies. The agencies were to be provided with requisite operational and financial flexibility and made responsible for designing, coordinating and catalysing this programme in the respective drought-prone districts The existing facilities and manpower of the implementing departments which continued to work under their respective heads were to be utilised for the implementation of this programme If the existing staff was not adequate to implement the additional schemes, additional staff and facilities were to be provided

The nucleus staff provided to each agency consists of a Project Administrator of the rank of Additional Collector, who acted as a member-secretary of the Agency He was asisted by a Project Economist, who was to make appraisal of projects, help in deciding priorities and correct allocation of resources The Credit Planning Officer was expected to assess the credit needs of the benficiaries and keeps liaison with financing institutions Each agency was also provided with an Accounts Officer to look after the accounts of the Agency These officers were provided with supporting staff.

Training and Research. Considering the difficult nature of the programme, leading institutions of the country were involved in training of personnel engaged in implementation of this programme A number of research projects were also taken up to study the different aspects—technical and managerial, and find solutions to the gaps in their implementation. Emphasis was placed on short-term and action-research projects so that improvements may be done in the operational aspects

Funding Arrangements. According to the funding norms. the central government was to provide to each district Rs 3 crores if 75 per cent or more of the area was drought-prone, Rs. 25 crores when the area was between 50 and 75 per cent and Rs 2 crores to each district with less than 50 per cent area. The states were expected to make matching allocations for the districts in their state plans. In addition to the above nucleus funds, each agency could raise, wherever necessary, institutional finance for direct investment. The drought-prone districts were also to receive funds under normal departmental plan schemes Six districts were also covered under World Bank assistance and allocations of Rs 8 crores were made to each of these districts.

Eighteen districts were covered under the programme as contiguous areas covering a few taluks from each district For each of these districts outlays were sanctioned at the rate of Rs 60 lakhs per taluk covered

International Aid The programme had evoked considerable interest in the foreign agencies providing financial assistance. The World Bank pro-

vided a total loan assistance of 35 million dollars for financing 6 projects, *viz*, in Anantapur (A P), Bijapur (Karnataka), Ahmednagar and Sholapur (Maharashtra), and Jodhpur and Nagaur (Rajasthan) over a period of five years An agreement was entered into with West Germany for commodity assistance of 26,000 tonnes of wheat in financing the rural development project of Bankura in West Bengal under the programme. European Economic Community has given assistance of U S. $ 7.5 million in three districts, *viz*, Hamirpur, Mirzapur and Jalaun in Uttar Pradesh

Subsidy to the Participants The small farmers were allowed a subsidy of 25 per cent and marginal farmers and agricultural labourers up to 33⅓ per cent on the investment cost of various programmes on the part of SFDA A uniform rate of subsidy of 25 per cent was fixed for all farmers on the cost of land development, soil and water conservation works and fishing nets. Cost of mulberry cultivation was subsidised to the extent of 25 per cent only in case of both small and marginal farmers The rate of subsidy in the case of group or community projects was 50 per cent on the cost attributable to small/marginal farmers Under farm forestry, the cost of planting material was borne by the Government

Subsidy to Financing Institutions The DPAP agencies were expected to mobilise institutional credit for enabling weaker sections to take advantage of the development programmes. The cooperative credit institutions, such as primary cooperative societies and central cooperative banks were provided with risk fund at 6 per cent of their advances as short and medium-term loans and 2 per cent on long-term loans to the land development banks. The subsidies allowed to the small and marginal farmers from project funds were paid in kind through the financing institutions by linking subsidies with loans The identified participants were thus encouraged to become members of cooperatives. A sum of Rs. 40 for purchasing four shares was given as interest-free loan by the agencies to small and marginal farmers and agricultural labourers. The agencies also give a medium-term loan of Rs 10 lakhs to the Central Cooperative Bank in the project area where the bank was not able to advance loans for lack of own resources to meet the condition of non-overdue cover.

Subsidy for Infrastructure Development The government bears 100 per cent expenditure on infrastructure development under various development heads except mandies, for which assistance of Rs. 3 lakhs per mandi is provided under the programme.

Outlays and Expenditure. The total Fifth Plan outlay on DPAP envisaged for 5-year period (1974–79) was around Rs. 336 94 crores. The actual outlay till the end of March, 1978 came to Rs. 259 09 crores including an amount of Rs. 24 crores for medium irrigation, whereas actual expenditure during the same period amounted to Rs. 189 crores consisting

of Rs 177 5 crores on normal DPAP programmes and Rs. 11.5 crores on medium irrigation (Table 1). The expenditure on normal DPAP schemes amounts to 75.5 per cent of the outlay of Rs 235 09 crores (excluding medium irrigation) sanctioned for this programme

Considering the percentages of expenditure to the total outlay sanctioned during 1974-78 (including medium irrigation) it could be seen that none of the states could achieve the targets completely (Table 1) Maximum expenditure was reported by Madhya Pradesh (91 per cent), followed by Tamil Nadu (83 per cent), Gujarat (80 per cent), and Karnataka (79 per cent) Haryana and Jammu & Kashmir reported the lowest expenditure of 59 per cent each Taking into account the share of the respective states in terms of absolute expenditure (percentage of expenditure to the total all-India expenditure). we find that maximum expenditure was incurred in Rajasthan (14 6 per cent), followed by Gujarat (12.9 per cent), Andhra Pradesh and Karnataka (11.7 per cent each), Uttar Pradesh (10.0 per cent), Madhya Pradesh (9.5 per cent) and Maharashtra (8 3 per cent) The rest of the states accounted for 21 3 per cent of the total expenditure incurred (Table 1).

The utilisation of funds (expenditure) on the basis of funds made available by the states and centre was impressive (Table 1) On the whole, it came to 89 per cent in the case of West Bengal and 97 5 per cent in the case of Tamil Nadu

The performance of different sectors in terms of financial expenditure is presented in Table 2

Nearly half of the total expenditure (48.5 per cent) incurred under DPAP during the Fifth Plan (1974-79) was in the irrigation sector (42 4 per cent on minor irrigation and 6 1 per cent on medium irrigation) Agriculture sector comprising of soil conservation and crop husbandry claimed nearly 15 per cent of the total investment made on DPAP Thus, it could be seen that as much as 63 per cent of the total investment was made on irrigation and agriculture. Afforestation/pasture development and animal husbandry were the other important sectors each claiming about 13 per cent of the total expenditure on DPAP.

In terms of ratios of expenditure to the respective sectoral outlays, afforestation and pasture sector led with an expenditure ratio of 87 per cent. Horticulture, irrigation and agriculture had expenditure ratios ranging from 70-74 per cent

The total outlay on DPAP in the country was Rs. 259 crores including special outlay of Rs 24 crores for medium irrigation The per cent state-wise outlays for different sectors as a portion of the total state-wise outlays (including medium irrigation) are indicated in Table 3 It could be seen that Maharashtra gave maximum emphasis to agriculture by allotting it about

Table 1 : Outlays of Expenditure Under DPAP During 1974-78 —All-India State-wise

(*Rs in lakhs*)

State	Outlay sanctioned during (1974–78)	Outlay for medium irrigation (1974–78)	Total expenditure during 1974–78 including medium irrigation	Percentage of expenditure to the outlay sanctioned during 1974–78	Percentage of expenditure to the total All-India Expenditure	Percentage utilisation with reference to funds made available
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. Andhra Pradesh	3418.25	225.00	2200.58	64	11.7	90.6
2. Bihar	1268.64	103.76	892.50	70	4.7	91.1
3. Gujarat	3059.59	230.17	2434.46	80	12.9	81.1
4. Haryana	670.09	150.00	392.55	69	2.1	84.3
5. Jammu & Kashmir	535.43	100.00	315.56	59	1.7	94.5
6. Karnataka	2794.92	220.00	2207.86	79	11.7	92.7
7. Madhya Pradesh	1975.62	212.79	1797.59	91	9.5	87.4
8. Maharashtra	2284.15	200.00	1561.16	68	8.3	83.4
9. Orissa	1025.04	148.85	673.42	66	3.6	85.9
10. Rajasthan	3874.41	252.00	2773.73	72	14.6	95.2
11. Tamil Nadu	1222.50	140.00	1010.83	83	5.3	97.5
12. Uttar Pradesh	2609.86	200.00	1899.79	73	10.0	94.9
13. West Bengal	1098.92	145.72	737.60	67	3.9	78.0
Total	25837.42	2400.00	18897.63	72.9	100.0	89.0

Table 2 : Sector-wise Position of Outlay and Expenditure During 1974–78

(*Rs. in lakhs*)

Sector	Outlay sancti-oned during 1974–78	Expenditure incurred during 1974–78	% of expendi-ture to the total out-lay in each sector	% share of each sector in total expenditure All–India
(1)	(2)	(3)	(4)	(5)
Agriculture	4010 25	2797 32	69 8	14 8
Minor Irrigation (Medium Irrigation)	12704 45	9146 65	72 0	48 5
Afforestation & Pasture	2873 45	2511 44	87 4	13 3
Animal Husbandry	3758 68	2461 74	66 0	13 1
Horticulture	196 13	145 41	74.1	0 8
Fisheries	293 03	186 85	63 9	1 0
Drinking Water Supply	369 10	233 01	63 1	1 2
Credit Management	261 07	162 93	62 4	0 9
Others	1442 97	1232 28	85 3	6 4
Total	25909 13	18897 63	72 9	100 0

29 per cent of the state DPAP outlay. The outlays on agriculture in Andhra Pradesh, Bihar, Karnataka, Tamil Nadu and Uttar Pradesh ranged from 15–20 per cent

Taking outlays for minor and medium irrigation together, we find that in Madhya Pradesh allocations to irrigation were as high as 76 per cent as against lowest allocation of about 36 per cent in Rajasthan This sector claimed outlays ranging from 51–69 per cent in Haryana, Bihar, Orissa, Tamil Nadu, Uttar Pradesh and West Bengal (Table 3)

The third important sector in terms of total all-India outlays was animal husbandry claiming as much as 14 5 per cent of the outlay In the states, the outlays for this sector varied from 20–27 per cent in Haryana, Andhra Pradesh, Maharashtra and Rajasthan (Table 3)

Afforestation and pasture development, the fourth important sector (11 per cent of the total national outlay on DPAP), claimed about 18 per cent in Gujarat whereas the outlays made to this sector in Bihar, Haryana, Karnataka, Maharashtra, Uttar Pradesh and West Bengal varied from 10–15 per cent of the state-wise outlays (Table 3)

Though the other sectors were allocated minimal amounts, their outlays are also presented separately (Table 3)

The state-wise percentage expenditure on different sectors of DPAP are presented in Table 4 It could be seen that almost half of the total expedi-

Table 3 : Per cent State-wise Outlays Sanctioned

S No	Sector	States					
		Andhra Pradesh (3418 3)	Bihar (1268 6)	Gujarat (3050 0)	Haryana (670 1)	J & K (535 4)	Karna-taka (2796.9)
1	Agriculture	17 9	19 3	14 1	11 4	12 7	20 8
2	Minor Irrigation	32 2	50 0	38 6	28 6	25 8	29 3
3	Afforestation & Pasture	9 9	10 6	17 9	14 5	6 0	12 8
4	Animal Husbandry	27 3	9 3	8 7	19 9	10 8	9.3
5	Sericulture	1 4	0 3	—	—	1 5	2 7
6	Horticulture	—	—	—	—	4 7	3 7
7.	Fisheries	0 9	—	0 06	—	0 6	7 2
8	Drinking Water	—	—	8 5	—	0 1	2 1
9	Credit Management	0 3	0 8	1 3	1.0	1 5	1.0
10	Project Management	1 6	1 6	3 3	2 2	—	0 2
11	Power	—	—	—	—	—	—
12	Apiculture	—	—	—	—	—	—
13	SFDA Facilities	1 7	—	—	—	—	—
14	Mandies	—	—	—	—	—	—
15.	Uncommitted	—	—	—	—	—	—
16	Others	—	—	0 01	—	17 0	2 9
17	Land records	0 2	—	—	—	—	—
18	Monitoring	—	—	—	—	0.7	—
19.	Medium Irrigation	6 6	8 1	7 5	22 4	18 7	7 9

for Different Sectors of DPAP (1974-78)

(*Rs, in lakhs*)

States							
Maha-rashtra (2284 2)	Madhya Pradesh (1975 6)	Orissa (1025 0)	Rajasthan (3874 4)	Tamil Nadu (1222 5)	U. P (2609 9)	West Bengal (1098 9)	Total (25909 0)
28.5	5 9	14 7	10.4	16 2	15 8	6 6	15 5
30 4	65 5	51 9	29 0	52 0	51 2	56 5	39.8
10 9	8 8	5 9	9 0	7 6	12 4	11 0	11 0
20 5	6 4	4 0	25 9	6.7	7 7	6 5	14 5
—	—	—	—	0 9	—	2 4	0 6
—	—	0 3	0 4	2 1	0.7	0 2	0.7
—	1 7	0 6	0 0	—	0.3	0.3	1.1
—	—	—	2.8	—	—	—	1.4
—	0 4	4.9	—	1.8	1 6	1 2	1 0
0 9	0 6	1 5	2.7	0.9	1 2	0 9	1.7
—	—	—	0 0	—	—	—	0.0
—	—	—	—	—	—	0.9	0 4
—	—	—	3.2	—	—	—	0.7
—	—	—	—	—	1.1	—	0 1
—	—	1 7	10 1	0 3	0 3	0 3	1 6
0 1	—	—	—	—	—	—	0.7
—	—	—	0 0	—	—	—	0 0
—	—	—	—	—	—	—	0.0
8.7	10.7	14.5	6 5	11 5	7.7	13.2	9 2

ture on DPAP in India was claimed by irrigation (including both minor and medium irrigation) during 1974–78. The relative share of this sectors in terms of total expenditure in the state was as high as 81 per cent in Madhya Pradesh. The other states where irrigation consumed a fairly high component of the total expenditure were Orissa, Tamil Nadu and West Bengal (65–74 per cent)

Agriculture comprising crop husbandry and soil conservation consumed as much as about 15 per cent of the total all-India expenditure. Expenditure on agriculture was as high as 30 per cent in Maharashtra. Against this, the expenditure on this sector varied from 14–21 per cent in Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka and Uttar Pradesh (Table 4).

In terms of expenditure, both animal husbandry and afforestation sectors had a share of about 13 per cent each out of the total all-India expenditure on DPAP Of the total expenditure on DPAP, the maximum expenditure was incurred on afforestation and pasture development in Haryana (22 per cent) followed by Gujarat (21 per cent), Uttar Pradesh (18 per cent) and Karnataka and West Bengal (each 16 per cent) (Table 4).

Animal husbandry shared 31 per cent of the expenditure on DPAP in Haryana, followed by Andhra Pradesh (28 per cent) and Rajasthan (22 per cent), Jammu & Kashmir and Maharashtra spent about 16 per cent each on this sector out of the total expenditure on DPAP (Table 4).

Grains from DPAP

One of the important recommendations of the Task Force was creation of District Development Authority for bringing about coordination among different development departments for ensuring the linkages of activities of different sectors Accordingly, the District Development Authority has been created to cover all the districts under DPAP This organisational innovation can be viewed as one of the major gains of the programme. This organisation attempted to bring about coordination among different development departments. Though nothing spectacular has been achieved in integrating the activities of the different departments, a beginning has been made in this direction and the district officials have at least started thinking in terms of interrelationship of their activities with those of other departments

Achievements in Different Sectors. The achievements of DPAP against the long-term objective have to be judged with reference to integrated effort made for development of watersheds which could help in restoration of the ecological balance Though this aspect was emphasised by the Government of India as well as state and district authorities in their Plan documents, somehow it did not find its due place in the reporting system. Some of the evaluation studies as well as discussions with the project directors/collectors of different DPAP districts in India who came to attend workshops at the NIRD reveal that though soil conservation activities were planned in most of

the DPAP districts on watershed basis, the implementation planning for other sectors was not done according to the concept of watershed. These activities were scattered all over the DPAP areas of the district in order to spend the amount allotted to the Scheme

However, during the last two years, a significant attempt has been made in this direction in Gujarat (Panchamahal and Amreli districts)* and in Rajasthan (Jodhpur and Nagaur districts)** The recent attempts on integration of soil conservation, afforestation, pasture development and improved economic practices for a defined watershed in these districts have been given a sense of direction for the long-term objective of DPAP. These pilot efforts can also be viewed as one of the major gains from DPAP

Intensification of Sectoral Activities Though watershed approach was not followed in most of the districts, the additional fund helped the DPAP districts significantly in the creation of infrastructure facilities as well as taking up actual development activities in different sectors

In this paper, only all-India figures have been presented A separate monograph on DPAP discussing in detail the state-wise physical achievements is under preparation by NIRD

Achievements during 1974-75 to 1977-78

The DPAP aimed at creation of durable assets which would help in mitigating the effects of drought in Drought-prone areas In fulfilment of this objective, it could be seen that an irrigation potential of about 2 30 lakh hectares was created through minor irrigation works The forestry and pasture development sector had brought 1.57 lakh hectares under afforestation, about 14,000 hectares under social forestry and 71,000 hectares under pastures (Table 5)

The progress under animal husbandry during this period shows that as many as 37,000 milch animals were distributed and 2203 milk producers' cooperative socities were formed An area of 3781 hectares was brought under fodder development.

Under programmes relating to sheep development, 515 sheep producers' societies were established and 6901 cross-bred rams were distributed from the ram multiplication farms to small and marginal farmers and agricultural labourers.

In the field of horticultural development 23 52 lakh fruit trees were planted over an area of 18,272 hectares. In addition, 74,980 hectares were reported to have been brought under vegetable cultivation.

* Department of Soil and Water Management with DPAP Agency, Panchamahals, Action Programme of watershed Management, MS IIIP roject, Santrampur Taluk, Panchamahals District Gujarat, 1977.

** District Development Agency, Test Check Works — Watershed Rampurabhatian, Soil Conservation Scheme, (Agriculture Department).

Table 4 : Per cent State-wise Expenditures Incurred

S. No	Sector	Andhra Pradesh (2200 58)	Bihar (892 50)	Gujarat (2434 56)	J & K (315 56)	Haryana (392 55)	Karnataka (2207 86)
1.	Agriculture	15 2	19 7	16 9	11.5	18 7	21.9
2	Irrigation	43 1	59.7	37.1	49 3	23 4	37 0
3.	Forestry & Pasture	9 4	12 6	21 2	9.8	22 4	16 4
4.	Animal Husbandry	27 6	7.1	7.5	16 8	31 3	7 8
5.	Sericulture	1.4	—	—	2 8	—	2.5
6.	Fisheries	0.2	—	0.0	0 0	—	7.0
7.	Credit Support Individual Beneficiaries	0.2	0 2	1.0	1.3	0 4	1 5
8.	SFD facilities	0 2	—	—	—	—	—
9	Project Management	2 7	0.7	7.1	0 1	3.8	1.3
10.	Land record	—	—	—	—	—	—
11	Marketing facilities	—	—	—	—	—	—
12.	Harticulture	0.0	—	—	6 3	—	4 4
13	Apiculture	—	—	—	—	—	0 3
14.	Drinking Water Supply	—	—	9 2	—	—	—
15	Power	—	—	—	—	—	—
16.	Others	—	—	—	2.0	0 2	—

* Agriculture sector includes soil conservation and crop husbandry, and irrigation sector includes minor and medium irrigation

on Different Sectors of DPAP — (1974–78)*

(*Rs in lakhs*)

Madhya Pradesh (1797 59)	Maha-rashtra (1561 16)	Orissa (673 42)	Rajasthan (2773 73)	Tamil Nadu (1010 83)	U P. (1899 79)	West Bengal (737 60)	Total (18897.63)
3.4	29 9	12 1	8 5	13 3	14 7	3 2	14 8
80 5	39.9	68 3	33 6	65 5	54 4	73 6	48 4
6 8	12 7	6 3	10 0	8 7	18 3	16 0	13 3
8 1	16 2	4 9	21 5	7 9	7 5	4 2	13.1
—	—	—	—	0 2	—	0 9	0 6
0 5	—	0 8	—	—	0 4	0 4	1 0
0 3	—	3 3	0 2	1 3	2 3	—	0 9
—	—	—	5 6	—	—	—	0 8
0 0	1 3	0 0	2 9	0 7	1 0	1.7	2 4
—	—	—	0 0	—	—	—	0 0
—	—	—	—	—	0 5	—	0 0
—	0.0	0 2	0 0	0 9	0 9	—	0 8
—	—	—	—	—	—	—	0 0
—	—	—	0 4	—	—	—	1 2
—	—	—	9 3	—	—	—	·1 4
0 0	—	—	7.9	1.4	—	—	1 3

Table 5 : DPAP — Physical Targets and Physical Achievements for the Year 1977–78 and Achievements During 1974–78 (Fifth Plan)

Programme Sector		Cumulative achievement during 1974–78 (V Plan)
(1)		(2)
I *Agriculture*		
A Soil and Water Conservation		
1 Soil Survey & Mapping	(ha)	24285
2 Area treated under soil conservation	(ha)	10757
B Crop Husbandry		
1. Area covered under Improved Farm Practices		
(a) Irrigated	(ha in '00)	40061
(b) Dry	,,	92243
2. Inputs		
(a) Fertilisers	(Tonnes)	480300
(b) Seeds	,,	143193
(c) Pesticides	,,	572337
(d) Implements	Nos	41419
II *Irrigation*		
1. Surface Irrigation Works — Irrigation Potential	(ha)	192285
2 Ground Water Development Irrigation Potential	(ha)	37993
3 Command Area Development Area Benefited	(ha)	286899
III. *Forestry & Pasture*		
1. Afforestation Area covered	(ha)	156992
2. Social Forestry	(ha)	13789
3. Pasture Areas	(ha)	70844
IV. *Animal Husbandry*		
A Cattle & Dairy Development		
1. Milch Animals distribution	No	37406
2 Calves born through artificial insemination	No	59078
3. Milk societies established	No.	2202
4. Fodder Development Area covered	(ha.)	3731
B. *Sheep Development*		
1 Cross Breed Rams distributed from Ram Multiplication Farms	No.	6901

Table 5 — (*Contd*)

(1)		(2)
2 Progeny born with farmers	No	29775
3. Sheep cooperatives established	No.	515
C Poultry units established	No.	1334
D Piggery units established	No	315
V. Horticulture		
1. Fruit trees planted		
(a) No of trees	lakh No.	23 52
(b) Area	(ha)	18272
2. Area under vegetables	(ha)	74980
VI. Fisheries		
1. Area Developed	(ha)	12528
2 Nurseries Developed	(ha)	23
3 Catch	Tonnes	17050
VII. Sericulture		
Area under Mulberry Cultivation	(ha)	3084

Overall Achievements during Fifth Plan *vis-a-vis* Target

Although activtiy-wise targets for every programme undertaken under DPAP have not been indicated, tentative targets for some of the major activities were envisaged. These targets envisaged for V Plan (1974-79) *vis-a-vis* the achievements during 1974–78 (V Plan) are given in Table 6.

Table 6 : Physical Targets and Achievements Under DPAP

Sector	V Plan Target (1974–79)	Achievements V Plan (1974–78)
1. Soil & moisture conservation (Lakh ha)	12 00	10 76
2 Creation of irrigation potential (000 ha.)	300	230 00
3. Forestry & Pasture (000 ha)	500	270 00
4 Distribution of milch animals (000 Nos.)	50 00	37 00
5. Organisation of milk producers' cooperative societies (000 Nos)	5 00	2 20
6 Organisation of sheep cooperative societies (Nos)	650	515

It will be observed that the overall performance for four years (1974-78) period compares favourably with the targets considered for the five-year period 1974–79.

Programme Beneficiaries

The total number of beneficiaries of DPAP under various sectors was 18 3 lakhs. The beneficiaries include not only the individual beneficiaries assisted under programmes such as supply of milch cattle, subsidies for execution of soil conservation works, etc. but also other beneficiaries indirectly benefited from the DPAP activities such as development of forestry, community irrigation works, community pastures, establishment of milk producers' cooperative societies, sheep cooperatives, etc.

The beneficiaries directly benefited under DPAP activities belong to the categories of small/marginal farmers/agricultural labourers, *i. e.*, those persons who were economically backward and were being given assistance by way of subsidies and support from institutional agencies for credit purposes.

The number of beneficiaries state-wise and sector-wise has been estimated on the basis of sectoral expenditure and quantum of subsidy and credit disbursed. The estimates of state-wise/sector-wise position of beneficiaries under DPAP is given in Table 7.

Table 7 : Sector-wise Position of Beneficiaries Under DPAP During V Plan (1974–75 to 1977–78) Estimated

State	Sector					
	Agriculture	Irrigation	Forestry and Pasture	Animal Husbandry	Others	Total
Andhra Pradesh	55,000	55,000	27,000	40,000	13,000	190,000
Bihar	67,000	13,000	—	67,000	16,000	163,000
Gujarat	130,000	13,000	—	40,000	13,000	196,000
Haryana	20,000	13,000	13,000	7,000	—	53,000
Jammu & Kashmir	9,000	7,000	1,300	1,400	1,300	20,000
Karnataka	50,000	50,000	27,000	40,000	13,000	180,000
Madhya Pradesh	70,000	70,000	—	—	—	140,000
Maharashtra	40,000	40,000	13,000	40,000	—	133,000
Orissa	33,000	13,000	—	7,000	—	53,000
Rajasthan	40,000	33,000	33,000	80,000	13,000	199,000
Tamil Nadu	130,000	40,000	—	40 000	15,000	225,000
Uttar Pradesh	70,000	50,000	30,000	13,000	13,000	176,000
West Bengal	60,000	28,000	—	8,000	7,000	103,000
Total	774,000	425,000	144,300	383,400	104,300	1,831,000

Schemes for agricultural development and increasing irrigation potential have benefited a large number of persons (nearly 12 lakhs out of 18.3 lakhs) followed by the programme concerning animal husbandry development

(3 8 lakhs). During the period of Fifth Plan (1974–78) about 1328 lakh man-days of employment were created

Gaps in DPAP

The analysis of gains from DPAP from the point of financial expenditure, physical achievements and creation of employment opportunities indicates that performance under this programme was quite good in most of the states in the country But if we consider the objectives of this programme we have to review its performance from a different angle It was emphasised that in DPAP, planning and implementation will be strictly on watershed basis, because this programme was essentially perceived as an area programme The beneficiary-oriented activities were added only to help the weaker sections in improving their income. But the major objective of DPAP was to make such intervention in the selected watershed which would help in long-term restoration of ecological balance For this, the concept of integrated area development was linked to the watershed approach. As stated earlier, it is only during the last two years that attempts were made to try out this concept in a few districts of Gujarat and Rajasthan. But in most of the other districts, sectoral officers considered DPAP only as a source of additional funds and intensified their activities without any attempt at integrated watershed development Therefore, even after five years of working of this programme no tangible improvement in the direction of restoration of ecological balance was achieved The Master Plans for different sectors of DPAP districts made at the time of inception of this programme were the compilation of 'shopping lists' made by different sectors Though in some districts there was a mention of division of district into major and sub-watersheds in the Master Plans, the actual implementation planning was not done on the basis of watershed approach. In most of the districts the land and soil capability surveys, resource inventory, etc were not made. The reporting system of DPAP emphasised achivements of physical targets, and more particularly, expenditure of the allotted amounts to the different sectors Therefore, each sector initiated as much activity as possible, to spend the allotted funds These activities were quite independent of the concept of development of specific watersheds.

It was originally perceived that the DPAP Plans should be dovetailed to the normal district plans and resources from DPAP and normal funds should be integrated in order to achieve the overall objectives of long-term development of the district But somehow this did not happen in most of the districts

With regard to the sectoral activities, the following analysis of the working of DPAP in the three districts, *viz.*, Kurnool (Andhra Pradesh), Jhabua (Madhya Pradesh), and Panchmahals (Gujarat) has been presented. This would give a fairly representative view of the working of DPAP in different parts of the country

Comparative Analysis of DPAP in Kurnool, Jhabua and Panchmahals[13,14,15]

The DPAP agencies were expected to prepare master plans for DPAP for the five years of the Fifth Plan The Master/Annual Plan documents did not reflect any attempt at devising optimal resource use patterns based on a study of existing resources and their uses in the districts Integrated area development and watershed approaches were not attempted for planning and implementation of the programme. On receiving communication regarding allocations made to their sectors, the sectoral officers proposed mostly routine schemes for implementation. At a later stage, a pilot watershed development programme was started only in Panchmahals district.

The implementing officers considered DPAP as a source of additional funds and hence the stated objectives and approaches of DPAP did not make any difference in the planning and implementing process. The DPAP agencies existed only because of their ability to provide funds and did not succeed in bringing about coordination among the departmental programmes

A study of the sectoral allocations under DPAP in these districts indicated that minor irrigation was allotted nearly 40 and 30 per cent of the master plan outlays in Karnool and Panchmahals, respectively, as against 92 86 per cent of the year-wise outlays on DPAP in Jhabua district for the first two years of the Fifth Plan This is not to suggest that uniform sectoral outlays should have been made to minor irrigation or other sectors in these districts It is only intended to point out the exceptionally high allocations made to minor irrigation in Jhabua, reducing the allocations to the other sectors to a level where the impact of activities under them could be negligible Besides, it has been already stated earlier that the sectoral outlays were made without carrying out resource endowments and development potential studies. Even after making sectoral allocations for the five-year period, allocations were revised from year to year giving more funds to those sectors which could absorb more and more funds and reducing the share of lagging sectors

Proper utilisation of resources in view of their scarcity was very important in drought-prone areas programmes Efficient management of land and water resources was specially important Watershed was, therefore, recommended as the most important scientific and approariate unit for planning and implementation of this programme in preference to the traditional district approach. The evaluation studies found that the concept of watershed planning and management was not clearly understood even at the district level. Besides, there was a problem of lack of data for different watersheds

Besides watershed approach, integrated area development approach was envisaged under DPAP for the development of drought-prone areas

in view of the serious constraints on resources Except in the case of animal husbandry, dairy and pasture development (afforestation) in Kurnool district, inter-sectoral coordination was totally lacking Intra-sectoral coordination was also very poor among the programmes in the agricultural sector In Panchmahals and Jhabua districts also, both inter-sectoral and intra-sectoral coordination was poor. Lack of integration among the different sectors and within the sector had resulted in the dilution of the impact of this programme in all these districts

In Kurnool district, the sectoral officials had to implement normal departmental schemes, schemes under the six-point formula aud special programmes, besides the Drought-prone Areas Development Programme. This was also true in the case of Panchmahals district where implementing officers were expected to execute similar schemes under the normal programmes of panchayat, tribal development and river valley projects. This creates problems in fixing priorities for spending the amounts allotted under various programmes as every funding agency exerts pressures to show certain minimum utilisation of funds as utilisation of funds is taken as an index of progress made

Monitoring is a very important tool for bringing about improvements in the process of programme implementation But most of the schemes/works are undertaken and accorded sanction without a definite time schedule for their completion. At present, monitoring is done by obtaining monthly and quarterly progress reports of financial expenditure and physical achievements. The information collected through these reports is, however, not analysed at the higher levels keeping in view the objectives of the programme and no feedback is given to the implementing levels. The implementation of schemes. therefore, proceeds in a routine manner without ensuring timely completion of inter-related schemes This practice is very costly in view of non-availability of potential benefits from them in time

Minor Irrigation

The project planning exercises were undertaken in a routine way following prescribed procedures and proformae existing in the departments Just as cost estimates and expected returns from the projects were based on routine calculations, the costs and benefits to cultivators were also worked out by generalising from the cost and benefit to a typical cultivator Most of the project reports did not contain definite time schedule for their completion. It was also reported that Command Area Development plans did not form an integral part of project planning

Escalation of costs of minor irrigation works was an important problem experienced in the three districts The variations in the costs as reported in the master plan, technical sanction and actual expenditure

reports were mainly due to the delays in technical clearance of schemes by the chief and superintending engineers and their actual execution by the contractors. Rationalisation of powers of technical and administrative sanctions at different levels deserves serious attention in the light of these experiences

The headworks and canal works of the minor irrigation tanks were not completed simultaneously In Panchmahals, only construction of head-works was notified first and tenders were invited. The contractors, however, did not take up canal works because of less profits in such works There was a significantly large time gap, sometimes of several years, between completion of headworks and canal works in Jhabua district Due to this, the benefits of minor irrigation projects were delayed.

Delays in acquisition of land, inadequate transport facilities to carry construction materials to the work site, shortage of cement, limitations of individual contractors were the reasons reported for delayed completion of irrigation works

No provision was made in the DPAP for repair and maintenance of irrigation tanks In Panchmahals repair and maintenance of these works were the responsibility of the district/taluk panchayat. However, it was difficult for them to spend money regularly for this purpose because of their poor financial resources. In Kurnool district, these local bodies were not involved in the implementation of DPAP and had no idea of their role regarding maintenance/repair of these tanks. The study of DPAP in Jhabua district is silent about this aspect of minor irrigation works.

The progress of groundwater survey was not satisfactory both in Jhabua and Kurnool districts. As the groundwater survey was to be undertaken for location of sites for digging community irrigation wells, the progress of implementation of this scheme was also poor.

Soil Conservation

Since introduction of DPAP, soil conservation comprises terracing and plugging in Panchmahals, contour bunding, gully control and farm ponds in Kurnool and land shaping, bench terracing, paddy field bunding, contour bunding and gully control in Jhabua

Soil conservation schemes in Jhabua district were formulated by following a standard procedure. The area for undertaking soil conservation was earmarked and a survey completed locating sites. The formulation of such schemes in Panchmahals was done in an *ad hoc* manner in the absence of a survey division to undertake soil and land capability survey. The preparation of soil conservation schemes was guided by the funds and staff available to take up the work In Kurnool district, the schemes were formulated by following standard procedures.

It was necessary that soil conservation works were undertaken in the commands of irrigation tanks, so that the rate of silting of tanks was slowed considerably. Despite this, there was no coordination between soil conservation, crop husbandry and minor irrigation activities in all the three districts While the soil conservation activities in Kurnool were confined to the Hundri river watershed, the dryland farming schemes were spread over the entire district

Dryland and Irrigated Agriculture

The purpose of dryland technology was to maximise yields during good rainfall years and minimise losses in yields during years of aberrant weather For this, the agricultural department planned to undertake demonstrations on dryland technology, arrange supply of inputs and improve the infrastructure facilities required in the project areas

The demonstrations on dryland technology were reportedly planned and implemented in these districts In Kurnool, it was found that these demonstrations were of a routine type aimed at showing cultivation of high-yielding varieties of crops with fertilisers and pesticides Demonstrations were also planned for introduction of drought-tolerent crops like safflower, sunflower, horsegram, etc Both the types of demonstrations were reported to have failed during successive years due to the failure of monsoons Besides the above demonstrations, it was reported that 100-acre demonstrations on a package of dryland technology were undertaken but they were also found to be of a routine nature According to the strategy, the dryland practices were to be adopted after treating the fields with soil conservation But there was no coordination between these programmes though they were implemented by the same department The practices of dryland agriculture to be followed in the event of aberrations of weather were not tried though contingency plans were prepared for such eventualities

In Jhabua district also, results of crop and soil conservation demonstrations were reportedly not encouraging because of the low comprehension levels of the tribal population in the district Similar demonstrations were organised with cent per cent assistance in Panchmahals district. These demonstrations failed as there were negative returns for crops covered under them Though these demonstrations were expected to show the applicability and practicability of dryland farming technology, in a majority of the cases, they were carried out under irrigated conditions

In both Kurnool and Panchamahals districts, expenditure incurred on crop husbandry was poor Comparatively, however, expenditure was better on schemes related to irrigated agriculture than those on dryland agriculture eventhough the latter was expected to play an important role in drought-prone areas The other schemes implemented under agriculture were of a

routine type and there was nothing special in them for development of drought-prone areas

Forestry

The afforestation schemes in Kurnool district included farm forestry tank foreshore plantations, canal bank plantations. sheep pastures, rehabilitation of degraded forests and avenue plantations. The progress of this sector in terms of utilisation of funds was not satisfactory. Lack of demand for plant saplings raised under the programme of farm forestry, lack of awareness among the people about plantation schemes due to the poor educational activities of this sector, use of inappropriate plant species (babul), uncontrolled and over-grazing of pastures by cattle of nearby villages. inadequate rains to promote growth of planted seedings, lack of alternative facilities for cattle grazing, inadequate attention to the technical feasibility of the schemes in the proposed areas, inappropriate priorities to the schemes on avenue plantations and laying out of community parks, inappropriate spatial locations and lack of coordination between forests and soil conservation departments were the weaknesses of the schemes in this sector.

A ten-year working plan for forestry was already being implemented in Panchmahals district when DPAP was initiated. This plan was the basis for planning of forestry schemes in the district It was due to this readymade working plan and adequate delegation of financial powers to the deputy conservator of forests that the progress of implementation of programmes of this sector, both in terms of financial and physical targets, was batter than in any other sector in Panchmahals

All the funds earmarked for this seetor were spent and physical targets achieved. However, there were some shortcomings in this sector's strategy. While emphasis was placed on afforestation in government lands, little attention was given to commercialise forestry in private lands Over grazing by cattle, illicit felling of trees for fuel and loss of large areas of forests to individuals due to political pressure, were factors that led to reduction of existing forest cover.

It was reported that the afforestation programme in Jhabua district was confined mainly to pasture development for several reasons. Firstly, pasture development was considered necessary for improving deteriorated site conditions quickly, by establishing grass cover which would in turn improve soil conditions and moisture holding capacity Secondly, its short gestation period was expected to bring quick benefits to the tribal population. And thirdly, pasture development was important for promoting livestock development for which there is a good future in the district.

The schemes for pasture development were prepared by following standard procedures on the basis of the master plan available in the district.

The locations were determined on the basis of existing forest areas, The number and size of schemes depended on the financial allocation which was only about 4 57 per cent of the total DPAP outlays for the district

Implementation of forestry schemes suffered due to delays in getting administrative approvals, uncertainty about actual financial allocations each year, lack of delegation of technical authority, lack of adequate quantities of suitable types of saplings and grass seeds, problems of adoption and problems of mortality of saplings, lack of effective supervision due to the widely dispersed rehabilitation programme

Livestock Development

Animal husbandry was the second most important sector under DPAP in Kurnool district claiming about 20 per cent of total outlay on DPAP. The sectoral programme comprised cattle development, sheep development, poultry development and dairy development schemes. On the whole, the performance of this sector in terms of financial expenditure was relatively better than the other sectors except soil conservation The reasons for poor performance in respect of some schemes under this sector were delays in sanction of funds and technical clearence of schemes from the state level, non-availability of staff to man the schemes, and *ad hoc* approach to making financial allocations The farmers' reactions towards the schemes of this sector were favourable as they helped to improve their income and provided continous employment. This sector had some linkage, though not satisfactory, with the afforestation sector.

In Panchmahals district, animal husbandry schemes under DPAP included development of cattle, dairy and poultry Due to the lack of clear cut policy on livestock development, the schemes prepared by the DAHO were finally approved after several revisions as late as January, 1977.

Cattle development in Panchmahals included three main schemes, *viz.*, location of mobile units, breeding and cross-breeding programmes and feed and fodder development An important feature of this programme was that cross-breeding was to be carried out by a voluntary agency, Sadguru Seva Sangh. It was found that the targets fixed for providing health cover and natural services to breedable animals were unrealistic for several reasons. Besides, the fodder development activities were also not sufficient to meet the requirements of green fodder in the project area.

Dairy development programme envisaged formation of 330 milk cooperative societies and to link them with the District Milk Products Union for marketing of milk. A milk chilling plant of 30 thousand litres capacity per day was not, however, sufficient for the average quantity of milk being collected per day.

As in the case of Kurnool district, only one she-buffalo was provided to each beneficiary under the scheme to supply milch animals The pro-

blems experienced in this programme were high cost of maintenance of animals in relation to their milk yield, lack of animals of good breed, death of calves and unremunerative prices for milk paid by the cooperative to the beneficiaries. The price policy of milk was favourable to buffaloes and this came in the way of development of milch cows As the sector's plan was approved as late as January. 1977 performance of this sector was very poor. Only 28 beneficiaries were financed under the poultry development scheme till the end of 1976-77 .

The allocations made for animal husbandry schemes in Jhabua district were very nominal As such, intensive development of cattle development was not possible in areas having irrigation and other infrastructure facilities. A scheme for supply of a dairy unit (2 buffaloes or 3 cows, supply of concentrates for 12 months, and subsidy for cattle shed) to progressive tribals was taken up with the Government's contributing 80 per cent of the funds towards the cost of buffaloes and concentrates The other schemes, *viz.*, establishment of bull stations, supply of poultry units and goat units and animal health cover were taken from the existing catalogue of schemes of the department.

Implementation of goat-rearing scheme and others suffered due to indequate decentralisation of administrative and technical powers As the 30 persons benefiting from the goat-rearing scheme were thinly distributed over a large area, it was not possible to provide proper technical guidance and health cover.

Credit

The original master plan for DPAP in Kurnool put the credit requirements in the Fifth Five-year Plan at Rs 146.97 lakhs for the programmes of crop and animal husbandry sectors only. It was found that progress in mobilisation of credit was very poor in the first two years due to the problems in the of identification of beneficiaries, delayed technical clearance of schemes, and reluctance of small farmers and others to avail, the benefits provided by the schemes. The scheme on supply of improved implements was taken up only in the year 1975-76. But the small farmers did not come forward to purchase the implements on 25 per cent subsidy. Such costly implements were not felt necessary by them for operating their small land holdings. Again, there was a directive from the state government that subsidy should not be allowed unless the loan component of the scheme was sanctioned by the financing institution The scheme on supply of plant protection equipments also made poor progress in the initial stages. Later, this condition was relaxed to facilitate progress of the scheme. But the farmers were reluctant not only to own such costly equipment for their small holdings but they were also not keen to use pesticide on crops in view of the risks involved.

In Panchmahals district, estimates of credit requirements for the project area were made by the credit team and the lead bank separately, which were put at Rs 650 lakhs and Rs 850 lakhs, respectively. It was reported that the flow of credit from the land development bank and commercial banks was minimal The bad overdues position of the banks was an important reason for poor progress of credit sector Besides, the peculiar features of backward and drought-affected areas where agriculture is uncertain and the economic status of the people is poor also act as constraints. The farmers who fail to repay the loans taken earlier do not become eligible for fresh loans according to rules

The study in Jhabua district did not report problems concerning flow of institutional credit for drought-prone areas programme

Strategy in the Sixth Plan

Under the new strategy, the emphasis will be on block planning. The objective of the IRD Programme is to provide full employment through productive programmes in selected areas. Under the new strategy, the Drought-prone Area Programme which is in operation in 532 blocks out of 5005 blocks of the country, will be integrated with the IRD The special features of the Drought-prone Area Programme will be taken into account while planning and implementing the IRD A review of implementation of DPAP during the Fifth Plan indicated the following major constraints and in the IRD, efforts will be made to ensure that these constraints do not impede the progress of the implementation of the programmes in the block selected under the IRD programme

1 Difficulties in getting institutional finances for soil-conservation programmes
2 Slow progress in many parts of the country in switching over to watershed management concept.
3 Inadequate enactments/enforcement of soil conservation Acts.
4 Lack of enthusiasm among the farmers for adopting soil and water conservation measures due to various factors
5 Delay in completion of irrigation schemes leading to escalation in costs
6 Inadequate adoption of command area development approach in the irrigated areas
7. Neglect of farm-forestry and social forestry, high cost of fencing in the development of pastures
8. Inadequate supply of improved animals and spurt in the prices of these animals
9. Inadequate attention to the beneficiary-oriented approaches.

10. Lack of coordination among various technical departments at the district level in the formulation and implementation of schemes.

The programme will continue to be implemented by the DPAP agencies already existing in these districts through the development blocks. Each block will get an additional allocation of Rs. 4 lakhs from the Centre and Rs 1 lakh from the State Government besides the normal grant for the IRD

The major thrust of the programme for the development of the rainfed and drought-prone areas would be on watershed management. It has been envisaged to cover one mini-watershed per block in the first year and then increase the number to 3,6,9 and 12 in the next four years. The programme comprises of (1) Landshaping on the entire watershed area; (2) Farm ponds in micro-watersheds for moisture conservation; (3) Suitable cover on community lands by afforestation and pasture development; and (4) Mixed cropping best suited for the soil, moisture and temperature conditions.

To what extent the long-term objectives of DPAP will be actually integrated with the short-term objective of employment generation in IRD is a matter which needs the special attention of planners and executives in the drought-prone areas

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COMMAND AREA DEVELOPMENT

R N Tripathy

Introduction

In the drought years of 1965 and 1966, famine in large tracts of the country was averted only by massive administrative efforts and huge imports of foodgrains. These years brought into sharp focus the importance of the role of irrigation. Although the area irrigated has considerably increased since Independence, it was clear that greater efforts were needed if the country was to keep pace with the rising demands of a rapidly increasing population. The birth-rate remained more or less steady during the years 1951 to 1971, but reduction in death-rate during this period resulted in a population explosion. The rising demand for food, fibres and oilseeds led to shortages The advent of high-yielding varieties of crops which involve more exacting water regimes, and the progressive use of fertilizers make it more important than ever to develop the utilisable water potential and to increase the efficiency of irrigation.

New areas could not be brought under crops without encroaching further upon India's already inadequate and depleted forest resources As any major leap forward in the field of irrigation would necessarily involve heavy investment, the answer lay in the intensive cultivation of existing arable land rather than in the expansion to new areas. New irrigation schemes would also involve time and cost factors In the circumstances, what was urgently required was an examination of the present status and the potential prospects of irrigation and to assess what had been done and what more needs to be done.

Land Resources

The total geographical area of the country is 328 million hectares Of this, only 305.5 million hectares are accounted for in the letest available landuse statistics. The difference of 22 5 million hectares for which land-use statistics are not available, largely consists of mountains, deserts and forests. Table 1 shows the classification of landuse for the years 1950–51, 1955–56, 1967–68 and 1974–75

Water Resources : Surface Water

An adequate, accurate and long-range study of the flows in rivers is essentially to have an idea of water resources of the country. The Irrigation Commission of 1901–03 had remarked that the data required to ascertain the extent to which rain water was utilized for irrigation were in

Table 1 : Land Utilisation Statistics

(Thousand Hectares)

Classification	1950–51	1955–56	1960–61	1967–68	1974–75
Area under forest	40,482	51,343	54,052	62,323	65,548
Area not available for cultivation	47,517	48,396	50,751	48,087	40,631
i) Land put to non-agricultural uses	9,358	13,920	14,840	15,588	17,068
ii) Barren and uncultivable land	38,159	34,476	35,911	32,499	23,563
Other uncultivated land excluding fallow land	49,416	38 895	37,637	34,561	34,018
i) Permanent pastures and other grazing land	6,675	11,473	13,966	13,881	12,878
ii) Land under miscellaneous tree crops and groves not included in net area sown	19,828	5,885	4,459	4,068	4,083
iii) Cultivable waste	22,943	21,537	19,212	16,612	17,047
Fallow land	28,124	24,127	22,819	20,833	25,608
i) Fallow land other than current fallows	17,445	12,544	11,180	8,775	9,116
ii) Current fallows	10,679	11,583	11,639	12,058	16,492
Net area sown	1,18,746	1,29,156	1,33,199	1,39,702	1,38,334
Total reporting area*	2,84,315	2,91,917	2,98,458	3,05,506	3,04,139
Area for which no return exists	43,773	36,131	29,590	22,542	24,639
Total geographical area	3,28,048	3,28,048	3,28,048	3,28,048	3,28,048

Source : Report of the Irrigation Commission, Vol I, pp 41–42, Ministry of Irrigation and Power, Government of India, New Delhi, 1972, and Indian Agriculture in brief — 1977.

* Due to change in coverage, the figures are not comparable from year to year.

many respects incomplete While records in respect of rainfall were available, data in respect of river flows were not available even for some of the most important river basins The Commission had, therefore, to depend upon assessment based on co-efficient of run-off and actual flow which it described as mere approximations It estimated the annual flow of all the river systems in India (as it was than, but excluding Burma, Assam and East Bengal) at 1,170 million acre feet.

It was only in 1945–46, when the Central Water and Power Commission was set up, that further thought was given to the assessment of the country's overall water resources. According to the studies made by A N. Khosla[1] who was the Chairman of the Central Water and Power Commission, the total annual flow of all the river systems in India came to 1,356 million acre feet.

The Central Water and Power Commission also worked out the surface water resources of different regions during the period 1954–66. The study was based largely on statistical analysis of the flow data, wherever it was available and, on suitable rainfall run-off relationship, wherever observed data were meagre. According to this study in the year 1960 the water resources of the various basins amounted to 1,525 million acre feet.[2]

Most of the gauge and discharge observations made so far have been undertaken in connection with existing or proposed projects, There was no attempt, until a few years ago, to make gauge and discharge observations aimed at studying the water resources of a river system as a whole At present, attempts are being made in this regard by various agencies—State Irrigation/Public Works Departments in connection with irrigation and hydro-electric projects, Highways Departments in connection with design of bridges, Railways for their requirements and Public Health Departments in connection with development of water supply schemes. The Union government has also recently undertaken gauge and discharge observations on the Krishna and the Godavari river systems following the recommendations of the Krishna–Godavari Commission. The Central Water and Power Commission has also been entrusted with the task of measuring discharges at key stations on a number of other river systems.

Quite a few rivers are still without proper gauging stations Automatic water-level recorders for determining the peak as well as the shape of the flood hydrographs are not in use in a number of major river basins. Another disturbing feature is the lack of continuity. Gauge and discharge sites are operated spasmodically. Gauge and discharge observation offices set up in connection with particular projects are often closed merely because there

1 A N Khosla, "*An Appraisal of Water Resources*", UNESCO, Paris

2 *Report of the Irrigation Commission*, Vol. 1, Ministry of Irrigation and Power, Government of India, New Delhi, 1972, p 45

happens to be delay in the implementation of the projects concerned. Lack of continuity is a great handicap in hydrologic assessment and analysis. It is when continuous and long-range measurements of river flows are available that it is possible to plan for the development of water resources in the most efficient and economic manner. The usefulness of this information in the planning of command areas has been discussed later.

Utilisable Water Resources

So far, no systematic study or analysis of the utilisable water resources of the country has been done except for the Indus River System. Some preliminary studies have, however, been carried out in respect of the Godavari, the Krishna, the Narmada and the Tapti rivers According to data now available, the entire water resources of these rivers can be utilised. The waters of the Cauvery have been practically fully utilised. As regards the Ganga which carries about 400 million acre feet of water, on an average, it should be possible to utilise about 150 million acre feet for irrigation development In view of the topography and the limited opportunity of storage, the rest of the water will continue to flow into the Bay of Bengal particularly in the monsoon season There is little possibility of utilising the Brahmaputra Waters except through a few medium and lift irrigation schemes in Assam. Nearly 300 million acre feet of Brahmaputra waters will continue to flow annually into the Bay of Bengal

The West-flowing rivers of India, excluding the Narmada and the Tapti, are another important and significant source of water. These rivers carry, on an average, 200 million acre feet of water. However, on account of the very short distance travelled by them in their flow to the coast and the nature of the terrain, the possibilities of utilising these waters for irrigation are very limited. It is, however, possible to divert a limited quantity of water from these rivers for irrigation. Nearly 160 million acre feet will still continue to flow into the Arabian Sea The Mahanadi and other east-flowing rivers have a sizeable water potential though only partial utilisation would be possible on account of the limited land potential and storage possibilities. About 60 million acre feet of water out of 100 million acre feet would still flow into the Bay of Bengal

The utilisable water resources of the country can thus be broadly summed up as shown in Table 2.

Progress of Irrigation under the Five-year Plans

Against the total picture of utilisable potential of 540 MAF, our achievements during the successive Five-year Plans, would need a brief reference.

Table 2

1	Narmada, Tapti, Godavari, Krishna Cauvery and other Southern rivers	200 MAF
2	The Indus System	40 MAF
3.	The Ganga System	150 MAF
4	The Brahmaputra System	10 MAF
5.	The Mahanadi and other east-flowing rivers	100 MAF
6	West-flowing rivers excluding Tapti and Narmada	40 MAF
	Total	540 MAF

Source : Report of the Irrigation Commission, Vol 1, p 57, 1972

The net area irrigated in the Indian Union in 1950–51 was 20.85 million hectares As 1.71 million hectares were irrigated in more than one crop season, the total extent of gross irrigation was 22.50 m/ha. The Planning Commission recognised the importance of irrigation in increasing agricultural production and, accordingly, assigned a very high priority to it in the First Plan. A large number of proposals investigated as a part of the post-war reconstruction were taken in hand immediately. These included gaint schemes like Bhakra Nangal, Damodar Valley and Hirakud projects on which Rs 800 millions had clearly been spent in the pre-Plan period.

Many more schemes, about 267, were included in the First Plan were also the pre-Plan schemes The First Plan sought to achieve an additional irrigated area of 3 44 m/ha. The actual achievement, however, was 1.25 m/ha The total cost of irrigation projects included in the First Plan was Rs 7,900 million taking into account Rs. 600 million of the pre-Plan period.

Irrigation schemes taken up in the Second Plan included 195 new works with an ultimate potential of 6.1 m/ha. The cost of the Second Plan schemes was estimated at Rs. 6,100 million and, together with a carry forward expenditure of Rs 4,100 million on First Plan schemes, the total cost of irrigation schemes in the Second Plan was Rs. 10,200 million. The actual expenditure incurred was Rs. 2,700 millions on First Plan schemes and 1,100 million on Second Plan schemes, *i e.*, a total of Rs. 3,800 million leaving a balance of about Rs. 6,400 for the future Plans The target in the Second Plan was 4.21 m/ha and the achievement was 50 per cent of it.

In view of the carryover of a large number of schemes, emphasis was placed on their completion in the Third Plan. Only nine new major schemes were taken up and together with the medium schemes, the total cost of irrigation during the Third Plan was estimated at Rs. 3,640 million. The total expenditure incurred during the Plan on all schemes including those continuing from the First and Second Plans was Rs 5,830 million.

As against the target of 5 2 m/ha the actual additional irrigation realised was only 2 1 m/ha

During the triennium of 1966-69 for which only Annual Plans were formulated, most of the states were preoccupied with the irrigation schemes already in hand. The total outlay on irrigation during this period was Rs 4,140 million.

The Fourth Plan again was a period of consolidation and progress. The total cost of the continuing schemes and the actual expenditure incurred on them before 1968-69 were estimated at Rs 24,600 million and Rs. 12,000 million, respectively, indicating a spillover of Rs 12,600 million A total outlay of Rs 7,710 million was provided in the Fourth Plan for continuing schemes. It was also proposed to take up new schemes in this Plan period at a cost of Rs. 9,540 It was expected that 4 8 m/ha. of additional irrigation potential will be created during the Fourth Plan of which 3 8 m/ha. will be put to use during the Plan period. However, only 2 56 m/ha actually came under irrigation The target for the Fifth Five-year Plan was fixed at 5 8 m/ha out of which 4 3 m/ha came under irrigation by the end of 1978. The Fifth Plan is significant in the history of irrigation and agricultural development in India because it is during this Plan period that the concept of command area for better utilisation of irrigation potential was introduced Apart from extension of irrigated area, the concept of the utilisation of the potential and of modern water management figured significantly From a meagre construction phase, we entered into the development phase

Programme for Medium Term Plan (1978-83)

Simultaneously, it is also proposed to further accelerate the tempo of irrigation during the next five years. For 1978-83, a target of an additional potential of 8 m/ha is envisaged from major and medium and 9 m/ha. from minor sources. For the first year, *i e* , 1978-79, it is assessed that a target of 1 5 m/ha is capable of realisation Table 3 gives the total picture of irrigation in the country since Independence

As against the coverage of area under irrigation since Independence, it may be of interest to note the Plan-wise financial outlay as presented in Table 4

Area and Crops Irrigated

The gross irrigated area for different crops has steadily increased from 22,563 thousand hectares in 1950-51 to 41,596 thousand hectares during 1974-75, although the total area irrigated from all sources is of the order of 47.1 million hectares Table 5 gives the area irrigated crop-wise, up to the end of 1974-75

Table 3 : Irrigation Since Independence

Items (m.ha)	Pre-Plan Up to 1957	End of First Plan 1951-56	End of Second Plan 1956-61	End of Third Plan 1961-66	End of Three Annual Plans 1966-69	End of Fourth Plan 1969-74	Up to the end of 1974-77
Irrigation Potential created from major and medium schemes	9.7	12.2	14.3	16.6	18.1	20.6	23.5
Area Irrigated from major and medium schemes	9.7	10.9	13.1	15.2	16.8	18.7	20.9
Area Irrigated from all sources	22.6	24.9	27.9	31.6	35.8	42.2	47.1

Table 4 : Layout on Irrigation During the Plans

(*Rs in millions*)

Plan	Major and medium	Minor Irrigation	Flood Control	Total Irrigation
First Plan	3,800*	550	130	4,480*
Second Plan	3,800	950	480	5,230
Third Plan	5,830	2,700	820	9,350
Annual Plans (1966–69)	4,140	3,140	430	7,710
Fourth Plan (Proposed)	9,540	5,160	1,330	16,030
Fifth Plan (1974–79)	30,890	7,920	3,540	42,260
Sixth Plan (1978–83)	72,500	17,250	6,750	96,500

* Includes Rs 800 *million incurred during the pre-Plan period*

Implementation of Irrigation Programmes in the Past

A review of utilisation of irrigation potential during the Plan periods reveals that at no time was the potential created utilised Certain investigations made to ascertain the shortfall in the utilisation of irrigation potential during the Fourth Five-year Plan have identified the following reasons for it : (1) Time slippage in construction schedule necessitating the creation of additional irrigation potential for reasons of non-fulfilment of target ; (2) Gap in utilisation of irrigation potential and inefficient use of land and available irrigation supplies , and (3) The execution of projects at a pace slower than the technical optimum level

The Planning Commission has also identified the following as factors which contribute to a situation of the above nature· (1) Lack of adequate investigations and non-preparation of project reports, particularly in respect of realistic cost estimates, time schedule for construction and the likely benefits to be derived ; (2) proliferation of projects under construction leading to a thin spread of financial, managerial and technical resources ; (3) absence of overall planning and determination of priorities with an eye on immediate at well as long-term benefits, (4) non-availability of construction material, such as cement and steel, in accordance with the programme of construction , (5) unforeseen cost escalation occasioned by substantial increase in the cost of material, equipment, land and labour, and also on account of changes in the scope of projects, and (6) non-adoption of the measures of integrated area development of the irrigation commands

Steps are thus clearly required to be taken to remove the inadequacies and shortcomings which have, in the past, adversely affected the execution, operation and optimum utilisation of irrigation potential throughout the country.[3]

3 Fifth Five-year Plan, Government of India, Planning Commission, Vol 1. pp. 104–105

Table 5 : Crop-wise Irrigated Area

(Area in 000' hectares)

Crops	1950-51	1955-56	1960-61	1965-66	1970-71	1974-75*
Rice	9,844	11,035	12,523	[illegible]	14,339	14,676
Wheat	3,402	4,150	[illegible]	5,401	9,921	[illegible]
Jowar	163	625	655	[illegible]	[illegible]	[illegible]
Total Cereals	16,373	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gram	974	1,191	[illegible]	[illegible]	[illegible]	[illegible]
Total Pulses	1,939	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Foodgrains	18,317	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Sugarcane	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2,152
Condiments and spices	+	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Fruits and Vegetables	+	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Groundnut	+	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total Oil Seeds	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Cotton	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Other crops	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gross Irrigated Area	22,563	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

* Provisional

\+ Included under other crops

++ Includes an area of [illegible] thousand hectares for which details are not available.

Source : Agriculture in Brief ([illegible]).

The irrigation Commission had observed that the utilisation of the irrigation potential was slow and was not efficient because, sometimes the requirements of modern agriculture have not been met and the command area development has not been planned at the time of project preparation. The National Commission on Agriculture has further pursued this trend of thought and recommended that in every old irrgation project modernisation of agriculture should be carried out and command area development simultaneously planned

Command Area Development : Its Background

Based on the recommendations of the Irrigation Commission and the National Commission on Agriculture, the whole issue of fuller and better utilisation of irrigation potential was considered by the Government of India and it was decided to establish Command Area Development Authorities (CADA) for irrigation projects in conjunction with detailed and co-ordinated action in different disciplines like irrigation, soil conservation, agricultural extension, cooperation and purveyance of adequate credit to the cultivators While steps should obviously be taken to reduce the gap between the irrigation potential created and the utilisation, greater attention is required to be paid in respect of certain other aspects of the existing arrangements and the prevalent practices for utilising irrigation supplies being made available to the farmers with a view to achieving the maximum productivity. It has not so far been possible for the beneficiaries to derive optimum advantage from such facilities on account of non-availability of assured and regular supplies in certain irrigation systems to meet the changed requirements of the present-day irrigation pointing to the necessity of taking expeditious steps to modernise it The problems are the non-construction of courses and field channels, the need for land levelling, land shaping and other land improvement works, the non-existence of proper drainage system leading to the problems of water-logging, salinity and alkalinity, the practice of doing field-to-field irrigation by flooding, the non-adoption of rostering system of irrigation as well as irrigation during the night, the inadequacy of infrastructure and inputs and also inadequate appreciation of the quantum of water required for each of the crops The combination of some or of all of these factors has led to the underutilisation of irrigation potential in the case of very large number of projects. Therefore, there was a need for defining the goals of sound irrigation policy, and of scientific management of water resources available. and introduction of modernised irrigation methods.

As already stated, some of the problems standing in the way of optimum utilisation of the irrigation potential are common to a vary large number of major and medium irrigation projects These problems cannot be tackled by efforts made at the local level The nature and the

magnitude of these problems point to the necessity of taking an overall view for dealing with it, particularly for the reason that fairly large investments are required to be made through public and institutional sources. Steps should, therefore, be taken for efficient utilisation of the irrigation potential along with adoption of improved techniques of soil and water management.

The desirability of preventing transmission losses in canals, branches, distributories, water and field channels, thus becomes obviously the first line of attack. The extent of the problem can be judged from the observation made by the Irrigation Commission to the following effect : "The main loss is through percolation, depending on the permeability of the bed and bank material of the channel. Theoretically, the depth of water in the channel and its temperature affect the seepage rate but the influence of these factors is relatively small. The commonly accepted figures for transit losses in the alluvial plains of North India are 17 per cent for main canal and branches, 8 per cent for distributories, and 20 per cent for water courses with a total loss of 45 per cent of the water entering the canal head. Then, there are further losses in the field itself and these have been estimated at 30 per cent of the supply reaching the field or 17 per cent of the head discharge. In heavier soils, the losses are lower and a channel constructed in clay loans is as good as a lined channel Losses are heavier in new channels though in course of time they decrease as the soils pores get sealed with finer materials. The process is more marked and quicker in channels that carry silt".[4]

While considering the desirability of effecting importing improvements in the existing irrigation system, the Irrigation Commission pointed out that many of the irrigation systems in the country date back to the 19th century or earlier and need to be remodelled in order to bring them up to date and to increase their effectiveness. The Commission further stated that modern agriculture is exacting in its demand for water, and high-yielding varieties call for irrigation regimes which many of these systems, in their present shape, cannot sustain Their usefulness is limited by structural handicaps such as outmoded head works, absence of suitable silt excluding devices and unsatisfactory arrangements for cross drainage. These handicaps are reinforced by other factors, such as faulty irrigation management and poor drainage and distribution system

The Irrigation Commission further considered the position in respect of a few representative systems of irrigation and highlighted the following inadequacies :

1. In the run-off-the river schemes, which derive their supply of water solely from diversion works on rivers, shortages are experienced during the low stages of river flows which occurs in the summer in the peninsular rivers and in the winter in the Indo-Gangetic rivers;

4. Report of the Irrigation Commission, 1972, Vol I, pp. 116–117.

2. The earlier irrigation systems of North India were designed with low intensities and cultivators given a share of water proportionate to their holdings in the command areas. They have naturally been applying water thinly to irrigate as much as feasible. This mode of irrigation is not conducive to high yields, particularly from the high-yielding varieties; and
3. On many irrigation systems, the channel capacities are inadequate for meeting peak demands during crucial periods like transplanting of rice, for irrigation of Rabi crops, etc

It was recommended that remodelling of head works, provision of regulators and escapes, enlargement of channel capacities, improvement of drainage in the command area and supplementing of supplies by providing storage backing should be taken in hand wherever necessary.

The National Commission on Agriculture considered at length the overall question of integrated development of command areas and the modernisation of irrigation systems. The Commission found that "Isolated efforts were made for improvement of existing canal systems mainly in the field of engineering None of these systems have been reviewed comprehensively for improvement in all aspects covering engineering structure for safety and better regulation, augmentation of supplies in the systems where deficient. efficiency in conveyance of water to the field, scientific application of water to crops and adoption of cropping patterns which would confer the maximum benefits".[5]

The Commission also emphasised on the importance of making a comprehensive review of the old and earlier plan projects in order to make them serve the needs of present-day agriculture better and highlighted the coordinated work required to be done by the Departments of Irrigation, Soils and Agriculture to organise the best use of irrigation system by modernising the same and adjusting the cropping pattern to the soil and agro-climatic conditions of the command areas

Concept of Command Area Development

The concept of command area, as would be clear from the preceding discussion, was primarily thought of as an area development programme based on the homogeneity of resource availability. in this case water. On this were superimposed the considerations of territory, location, administrative unit and pattern of socio-economic interaction—all to be purposively directed and integrated to bring about fuller and better utilisation of water resulting in higher production The integrated development of command area was conceived as (1) Development of main drainage system beyond the farmers' block of 40 hectares where it does not exist now and its

5. Report of the National Commission on Agriculture, Government of India, Ministry of Agriculture & Irrigation, New Delhi, 1976, p 59

improvement and modernisation to secure desired agricultural production; (2) development of field channel and field drainage system within the farmers' block under each delivery head of the irrigation system so as to minimise water losses, prevent water logging and enable a proper system of "Warabandi" and fair distribution to individual fields, (3) land shaping of a watershed area in the command for the type of irrigated crop that is being allowed in the command in each farmer's block; (4) exploitation of groundwater to supplement the surface water and build a suitable surface water and groundwater balance in selected blocks of groundwater potential ; (5) fixing and enforcing suitable cropping schedule for the various blocks in the command keeping in view the following considerations · *(a)* when water availability is plentiful, maximum output per unit of land, *(b)* where water availability is medium, maximum output per cent of water, and *(c)* where water is scarce, selection of such crops which require low duties of water and immunising as large an area as possible from the effects of drought; (6) preparing a plan of input supply and credit, seeds, fertilizers, tractors and sprayer services; (7) arranging the inputs and services, and (8) planning the necessary marketing and processing facilities and the communications for maximum benefit to the farmers and maximisation of labour to the local population

Area Development Approach

Instead of taking up various developmental programmes in isolation, there was clearly the need for adopting an area development approach in command areas. The programmes for integrated development of the command areas should deal with all the aspects of development as outlined earlier.

Area Development Authority

The area development approach is linked with the question of setting up of an area development authority for the various irrigation commands The Ministry of Agriculture and Irrigation discussed this question with the state governments in June, 1973. Although no final and agreed structure emerged out of the deliberations, there was unanimity in regard to the following points :

i) Whatever may be the structure of the Area Development Authorities considered appropriate by the states having regard to the local conditions, a unified organisation with a direct line of command should exist in so far as development of irrigation, agriculture, soil conservation and cooperation are concerned. There should also be an in-built system for close liaison with other departments dealing with allied programmes;

ii) For on-farm development, it was visualised that there should be a Land Development Corporation or a Farmers' Service Society for

meeting the requirements of funds. Such a Corporation or Society should have an investment programme with owned funds as well as funds obtained from the various financing institutions, and

iii) Proper arrangement should exist for execution of on-farm works on behalf of the beneficiaries whenever this is warranted.

Justification for Area Development Authority

The area development authority should have full control over the various services in the area whose coordination is essential for the success of the programme. At the same time, it has to be recognised that the staff of the services, instead of being responsible to several departments and in several matters to the Panchayati Raj bodies in the area will all be responsible and answerable to the area development authority only. This means that departmental hierarchies will need to be unified at the field level. Though the developmental functions that the area development authority may have to perform, in several cases, would be the same as those normally within the general purview of the Panchayati Raj bodies, and other departments of the State Government, the justification for this change would result in the area development authority giving more detailed attention to agricultural development of the area as against the general and inadequate attention given by the Panchayati Raj bodies and other departments. The unified control is normally desirable in the activities relating to intensive growth to overcome the possibility of lack of coordination among the departmental hierarchy and loyalties to different organisations A decentralised administrative structure, as also a purposive body with one objective is being created In the command areas, the main objective of the area development authority would be control on water and crop planning and help in agricultural programmes with special reference to the improvement of small and marginal farmers and agricultural labour. Where electrification is required for groundwater utilisation, the field electricity organisation may have to be within the jurisdiction of the authority

While control on the use of water and making the land fit to receive it would be the main function of the authority, the detailed design and planning, however, has to be secured through the existing technical departments of the state governments

The area development authority should have the freedom of financial planning of own funds as well as funds borrowed from financial institutions. In terms of financial operations the authority is required to perform the following functions : *(i)* allocation of budgetary resources for the programmes which are mainly state programmes and substantial authority is required in carrying through the programmes subject to budgetary allocation limits, *(ii)* facility for direct investment in services, marketing and processing operations including land development and facility for taking

loan from the institutions for such programmes, etc, and *(iii)* facility for the recovery of dues from their direct operations by simple statutory processes and nomination of recovery officers from within the organisation to facilitate such recovery

For functions of the type mentioned above, a purely departmental structure like an area development board with powers given by the government resolution may not have the necessary autonomy in functioning On the other hand, a society or a corporate form of organisation will have more elasticity in financial management The area development authority, therefore, took the form of a registered society in the command areas.

Command Area Development Authority (CADA)

In many states the area development authority took the form of command area development authority responsible for water utilisation and integrated area development of the irrigation commands, including modernisation of the distribution system Its jurisdication is the gross area commanded by the irrigation project A list of command area development authorities (CADA) is furnished in Appendix 1. The irrigation Projects which are still without command area development authority are listed in Appendix 2

Functions of CADA. With the constitution of command area development authority by legislative enactment in some States, the functions and responsibilities of the authority were expanded A representative list of functions entrusted to the authority is given below ·

i) modernisation, maintenance and efficient operation of the irrigation system up to the outlet of one cusec capacity,

ii) development and maintenance of the main and intermediate drainage system;

iii) development of field channels and field drains within the command of each outlet,

iv) land levelling and land shaping on an outlet command basis for the type of irrigated crop that is to be grown;

v) consolidation of farm holdings and redrawing of field boundaries on an outlet command basis,

vi) enforcement of proper system of "Warabandi" and fair distribution of water of individual fields;

vii) development of groundwater to supplement surface irrigation;

viii) selection and introduction of suitable cropping pattern;

ix) supply of all inputs and services including credit;

x) development of marketing and processing facilities,

xi) preparing individual programmes of action for small and marginal farmers and agricultural labour as a part of the master plan of development for these categories of beneficiaries;

xii) diversification of agriculture and development of activities like animal husbandry, farm forestry, poultry, etc,

xiii) soil conservation and afforestation where necessary, and

xiv) Town Planning.

It will be seen from the above list that the items of work entrusted to the command area development authority are quite comprehensive to include all aspects of irrigation development as well as utilisation of irrigation water.

Constitution and Powers

The CADA in most states is the product of government legislation There is a Board set up for each CADA for preparing and supervising the implementation of the various programmes, removing bottlenecks and reviewing progress from time to time. The command area development commissioner is the Chairman of the Board. In addition, the Head of the Departments of Agriculture, soil conservation, cooperation and irrigation are members of the Board. A representative of the Finance Department is also included. The President of the concerned Zilla Parishad, Land Development Bank or Central Cooperative Bank and a representative of the Commercial Bank of the area which is acting as the Lead Bank are members of the Board In some states, two non-officials who are farmers in the command are also nominated to the Board.

It will help coordination with the Revenue and Law and Order Authorities if the Administrators/Commissioner is concurrently the Divisional Commissioner of the Division in which the command area lies However, in some states where the Head of the CADA is designated as Administrator and is an Engineer as in Maharashtra, he does not enjoy the powers and functions of the Commissioner which are exercised by the Divisional Commissioner.

Staff

Administrative control over the staff of the various concerned disciplines, such as, irrigation, agricultural cooperation, revenue, etc., functioning in the area falling within the jurisdiction of the CADA is transferred to the CADA. Additional staff as required by the authority are made available by the various departments for the purpose.

Budget

The State Governments have a new Budget Head on account of CADA. The Budget Head consists of.

i) Existing expenditure on the staff and the programmes of the various Government Departments on activities entrusted to CADA in the area falling within its jurisdiction,

ii) such funds as are agreed to in the Annual Plans for carrying out various additional programmes decided to be taken up in the command area in the State sector; and

iii) grants-in-aid/loans to be made available by the Government of India for such activities as may be included in Central Sector Plans.

Legislative Support

There are different irrigation statutes for different states, but in most states, there is a multiplicity of laws covering various aspects of irrigation management and administration. The result is a plethora of statutes and rules. While the statutes do not fully cover the total requirements of a comprehensive approach adopted for command area development, the multiplicity of laws providing for multiple lines of authority and diversification of control diffuse responsibility. An attempt is made in the section to indicate the legal support necessary particularly in regard to the following aspects;

1. On-form development
2. Irrigation practices
3. Groundwater
4. Enforcement of cropping schedule
5. Maintenance of structures and channels

On-Farm Development

The objectives of on-farm development are to achieve more efficient water-use and drainage which will improve intensity of cropping and productivity. In order to achieve this the legislation on this aspect should include realignment of farm boundaries (as distinct from normal consolidation of holdings), construction of irrigation and drainage channels and land levelling and shaping. As implementation of systematic on-farm (development programme must include the entire outlet, development has necessarily to be compulsory as no landholder can be left out and the cost of works has to be recovered from the land benefited. Legislation for this purpose should include preparation of detailed scheme for water courses, field channels and drainage, farm access roads and realignment of boundaries. Execution of the above schemes with or without the consent of landholders is the main problem. The states which have established CADA envisage obtaining majority consent for introducing these schemes. The cost of these schemes is recovered from and occupier of the land as distinct from owner of the

land to overcome the difficulties of defective title to land and obtaining finances from the institutional sources.

Irrigation Practices

Most of the states with older irrigation systems have laws governing suitable irrigation practices. Punjab, Uttar Pradesh, Haryana and Rajasthan have amended their older Acts to prove for a comprehensive arrangements in this regard. In the Western Region, Gujarat and Maharashtra have introduced legislation which provide for compulsory construction and maintenance of water courses. Karnataka has a very comprehensive Act enacted in 1965 conferring power on the state in irrigation and water management As a part of this legislation the State Government has the power to prescribe the cropping pattern under rules of localisation of crops. Tamil Nadu has several statutes covering different aspects of irrigation practices which also applied to Andhra Pradesh.

The Ministry of Agriculture and Irrigation has recently proposed a model irrigation legislation with a view to introducing a certain measure of uniformity in the country and in the different regions. The matter, at present, is under consideration of the States.

Groundwater

The existing irrigation acts do not define the ownership of sub-surface of groundwater which, therefore, is considered as belonging to the owners of the land. But in view of the vital importance to the nation of groundwater for agriculture in different parts of the country. it is essential for Government to extend control over it and to provide for its methodical and systematic exploitation in conjunctive use with surface water. Some States have enacted legislation regulating irrigation by tube-wells, particularly alongside the canals The Ministry of Agriculture and Irrigation has already drafted a model bill for the control and regulation of groundwater and circulated it to the States

Cropping Pattern

Cropping pattern has to be fixed, keeping in view the soil and agro-climatic conidtions, in order to achieve the optimum benefit from the irrigation water. Legislative support has, therefore, to be available to enforce suitable cropping patterns as well as to regulate supply of water for irrigation. As mentioned earlier, states of Karnataka, Maharashtra and Rajasthan have assumed legislative powers to enforce cropping pattern. For instance in Maharashtra, the farmer is required to obtain sanction for irrigation of various crops and is issued a pass-book. An irrigation official enters in the pass-book the date on which the farmer will get water. Cropping patterns are sanctioned in compact blocks which vary in size. This system of regulation is called "Block System", the blocks being generally

named after important crops grown The pattern is also followed in Karnataka and generally for irrigation commands in parts of south where most of the irrigation works are protective systems against the effects of drought, as distinct from the productive systems in some other parts of India

For the reason mentioned above, enforcement of cropping pattern is not visualised in the irrigation commands of the north India where most of the works draw their supplies from perennial snow-fed rivers and the areas which these projects serve are flat with alluvial soil. Under these circumstances, there was, perhaps, no need for imposing restriction on cropping. It was left to the farmers to choose their pattern Later, however, a few regulatory measures were adopted. These includes ban on growing of paddy within half a mile of habitation as an antimalarial measure and an extra-rate for irrigation of sugarcane from November 15 to January 15 so that larger supplies could be made available for crucial irrigation of Rabi crop during this period

The above described are only illustrations What is essential is to have a full legislative support for enforcing cropping pattern and a proper rostering system for supply of irrigation water

Maintenance

Some irrigation Acts do provide for maintenance of field channels and drains by the beneficiaries Clear legal support should be available for the Government to maintain field channels and drains at the cost of the beneficiaries, in case the latter fail to do so The model law prepared by the Ministry of Agriculture and Irrigation includes provision on this aspect

Sectoral Activities

1. Land Development. Land Development is the most important prerequisite for successful and sustained irrigated farming in command areas. In the country till recently, irrigation was considered as only construction of reservoirs and canals to deliver water for irrigation at the canal outlets. It was not generally recognised that this is only a part of the job of irrigation. To make the water available to each and every field in the project area for raising agricultural production is now being required as very important. It is also costly and often more costly and time-consuming.

The objectives of land development for irrigation may be stated as follows:

i) efficient water distribution among each and every field within the command of the outlet;

ii) uniform water distribution and efficient soil and water management;

iii) adequate drainage for excess water from the fields, and

iv) adequate access to each field by farm road.

While these are the general objectives of land development, feasibility studies have to be made to find out whether land development under certain situation is economically and technically justifiable For this purpose information on contour, farm boundaries and size of land holding, etc. meteriological data for a period of past five or ten years, data on water requirement of crops, irrigation water availability showing water delivery schedules including water duty, general information on cropping pattern and crop calendar, water table conditions showing seasonal fluctuations, salinity and alkalinity of soil, soil structure, depth, infiltration, premeability and water holding capacity is required to fix irrigation and drainage criteria such as, field slope, land shaping and levelling, etc

PLANNING AND DESIGNING LAND DEVELOPMENT

Planning for land development should satisfy the following criteria:

i) the water distribution and drainage system should be designed to facilitate efficient distribution and control of water from the source to each field and timely drainage of excess water from irrigation as well as rain,

ii) the field layout and land preparation should be such as to enable efficient soil and water management and should facilitate use of equipment for cultivation and make possible diversified cropping,

iii) it should conserve soil and water and promte protective measures against soil erosion; and

iv) the land development plan should involve minimum cost for execution and minimum loss of land under bunds, channels, drains, etc.

The above criteria necessitate planning to be done in an integrated manner taking into consideration the requirements of planning and designing land development

WORLD BANK PARTICIPATION

Realising the importance of land development in command areas, World Bank has extended financial assistance to a number of projects in the country and has also, through its experts, undertaken a large number of experimental studies in the command areas, to demonstrate the economic of land levelling and land shaping One of the experiments undertaken at the Chambal command area in Kota district of Rajasthan has proved to be quite successful. Appendix 3 Provides information on land development work undertaken in command areas state-wise up to March, 1978.

RESULTS OF PILOT STUDIES

A number of pilot studies on land development undertaken in the command areas point out that the cost benefit of land development depends

upon many factors such as, equipment used for levelling, management efficiency, nature of land, etc. The findings also imply that while it is profitable to undertake land development, there must be a sizeable increase in production inputs and management ability in order to realise the full potential of land and water resources as reflected in the net income High-level returns can be achieved only if the land is continued to be managed intensively and well. The results achieved in the pilot projects further indicate that land development for better utilisation of irrigation water is a good investment opportunity for farmers whose land is not capable of good yields due to adverse slope conditions. A list of soil and water management pilot projects is provided in Appendix 4.

2. *Soil Survey.* Soil survey in the command areas assumes special significance in the context of large investment made in developing water resources coupled with the potential danger which appear in many cases under the largely altered water regime which can annul the benefits accruing from irrigation Large-scale agricultural and socio-economic developments are envisaged in the wake of water coming to the land. Soil survey of such areas, therefore, must meet the needs of integrated development of the command areas The soil survey should provide information on the following aspects

i) suitability of different soil areas for sustained use under irrigation with special reference to the cost of land development, drainability of land and possible long-term effect of irrigation on soil salinity.

ii) the extent of land development needed for efficient water use, particularly, in terms of land levelling and shaping and restriction imposed due to soil depth together with the areas susceptible to high seepage and percolation losses where special water management practices may be required;

iii) areas suffering from drainage problems and requiring special reclamation measures; and

iv) crops to be grown in different soil areas for optimum production keeping in view the most efficient use of water and other management practices required.

The utility of the soil surveys depends upon the mapping scale, legends, survey procedures and interpretation of data. How closely the soil map corresponds to the field conditions depends upon the training and experience of the surveyors

In the command areas, it has been the common observation that information on the soils is either missing or too scanty to make any use of it even for assessing the problems of land and agricultural development.

SOIL SURVEY PILOT PROJECTS

A number of pilot projects on soils and water management have been undertaken in different command areas In these pilot project areas, detailed soil survey was carried out by using cadestral base maps Soil mapping was done by traversing the area and soil boundaries were further refined with the help of aerial photo interpretation wherever available. Soils of similar profile characteristics were thus isolated.

The results of the Pilot Projects have thrown up useful data regarding soil and land irrigability classes, relative suitability of soils for paddy, relative suitability of soil for withstanding erosion hazards and surface run-off, excessive loss of water by percolation, limitation to land levelling imposed by reduction of soil depth, probable yield and quality of the crop under the type of management commonly practised State-wise and year-wise progress of Soil Survey and Topographical Survey under CAD Programme up to March, 1978 is presented in Appendix 5 and Appendix 6.

SALINITY PROBLEM

Salinity is a common problem in the command areas of the old irrigation projects In the command of the new irrigation projects the problem is also developing fast The pilot projects have furnished diagnostic techniques for identification of such areas and have also suggested appropriate measures

3. *Cropping Pattern* It has to be appreciated that irrigation brings something more than water to the command area Its first impact is on the cropping pattern which undergoes a quick change The irrigation cropping pattern is dependent for its water supply on the vagaries of rainfall. More often the crop varieties under rainfed conditions differ in their response to moisture, fertilization and other inputs from the ones grown with irrigation water. The cropping pattern for an irrigated area must take into account the technical, economic and specifically the social aspects of the area.

Under the technical aspects, the main consideration would be the soil types, their suitability for growing specific crops, rainfall pattern and climatic conditions. While selecting a cropping pattern ecological aspects have to be borne in mind to avoid any possible damage to the general environment of the area

The economic considerations would revolve round achieving maximum benefits per unit of water used However, there may be some serious constraints in the approach. For example, a crop like long staple cotton gives the maximum benefit for unit of water But due to limitations of soil suitability, rainfall distribution pattern over the entire command, coupled with non-availability of adequate quantity of seed, fertilizers, pesticides, it may not be possible to cover the entire area with long staple cotton.

Further some consideration would have to be given to devoting some area under foodcrops Price support is also another important consideration in this regard.

Achieving the desired social objective imposes another major constraint on the cropping pattern Maximising economic benefit may restrict the irrigation supply only to a small area or small number of beneficiaries. However, to achieve social justice, means of production, including irrigation water have to be made available to a larger number of beneficiaries although it may not be best from the economic point of view in terms of higher cost-benefit ratio Another social consideration would require formulation of cropping pattern to provide opportunities of employment for agricultural and other labour for the major part of the year and to encourage agro-based industries.

Cropping pattern has to be based on soil and climatic conditions in relation to water availability With the progress in communication and market facilities it is not necessary for the beneficiaries to grow every type of crop they may need for family use. In the present context, social considerations may overtake the economic considerations, but it would be in the interest of the beneficiaries as well as the country to have a compromising approach to this problem which will be to the best advantage of the individual and the nation

While deciding cropping pattern, it may be necessary to take into account groundwater availability too. Wherever groundwater is available, introduction of high water consuming crops and summer cropping can be included provided other conditions, such as, soil, drainage, etc. are favourable. Such crops would necessarily draw their requirements of water from groundwater during summer months alone Conjuctive use of groundwater and surface irrigation would also mitigate the problem of water-logging and drainage

4. *Drainage Requirements.* Drainage investigations should be taken as a part of routine soil survey, eventhough there may not be an immediate possibility of water-logging. Such an investigation would help in Planning on-farm developments comprising drain-ways to overcome possible water-logging. Drainage problems develop sooner or later in irrigated areas.

It is usually observed that in a command area where irrigation is brought for the first time, natural drain-ways are either poorly developed, especially in low rainfall areas, or get choked due to illegal occupation and encroachment of land by the cultivators. The drainage system must not only carry the excess rain water but also the seepage water from canals and distributaries which accumulate through inefficient application of water in the fields Measured water application efficiencies often run as low as 25 per cent and seldom exceed 80 per cent. Consequently, the water to be drained that comes directly from irrigation will range from 20 to 75 per

cent of irrigation water applied. In addition, seepage from canals may account for as much as 30 to 50 per cent of water diverted from the canal head. They all add to the sub-soil water which often shows a tendency of rapid rise in the command areas

Water transmission rates are important in planning and designing drainage system Soils exhibit extreme variability with regard to their water transmission rates The variability is exhibited not only in lateral directions, but also in depth The permissible depth and mode of variation of the water-table and the quantity of water that a drainage system must carry both through surface and sub-surface are included in the drainage requirements

Farm operations can be seriously delayed if the soils remain wet for a long time Inadequate aeration may cause serious pathological, physiological and nutritional disturbances in the crop. Provision of drainage is important for increasing the agricultural productivity of land but there are many other beneficial effects particularly in establishing communications and roads and safeguarding public health. The drainage programme of command areas should be integrated with the development of irrigation system and land shaping in order to attain an efficient overall control over water and salinity problems.

5 *Conveyance System.* It has already been stated in an earlier section that considerable percentage of water is lost by seepage in the field channels. Some estimates of loss which have been presented in that section highlight the urgency and desirability of preventing these losses. It is in this context that lining of the field channels and main channels has been advocated On some of the canal systems, first mile or more of the field channels is lined at Government cost Lining is done by conventional methods by using cement concrete and masonry. These types of linings, however, have high cost which the cultivators cannot afford at present. There is, therefore, a need for developing economical method of lining to control the seepage losses Research work is being carried out on evolving a cheap method of lining making use of alkothene, compacted soil, betonite, water proof mud plaster sheet, asphalt, etc in irrigation research institutes in Uttar Pradesh, Punjab and Bihar.

The main difficulties that came in the way of proper alignment and grading of field channels are : (*a*) Lack of agreement of all the cultivators on the alignment to be adopted, (*b*) inability to obtain the land required for the purpose ; (*c*) unwillingness of small cultivators to part with a portion of their already small landholdings · and (*d*) lack of technical know-how on the part of the cultivators Timely clearance and proper maintenance of the field channels is as important as their initial construction As the obligation to carry out these operations at the correct time rests with the beneficiaries, it is being enforced by the village local bodies.

The importance of lining the channels has to be seen in the context of lining the main canals also. A number of lined canals have been already constructed in the country in recent years as for example, the Rajasthan Canal, Sirhand Feeder, Bhakhara Main, Western Gandak Canal, the Parambikulam Aliar system and the Mahi Right Bank Canal However, those unlined are many and are estimated to carry a discharge of 4,00,000 cusecs. It has been estimated that lining can save enough water to irrigate an additional 15 million acres Of course, not all the canals can be lined for reasons of cost and prafitability but the figures mentioned give some idea of the enormous scope of saving water which is not only being wasted but creating positive harm to the command areas. Information on state-wise and year-wise construction of field channel, lining of field channel and construction of field drains is given in Appendices 7, 8 and 9, respectively

6. *Distribution of Water Among Farmers.* The area which receives water from a canal outlet generally belongs to a number of cultivators As every cultivator is naturally anxious to obtain the maximum quantity of water available at the earliest possible opportunity, it becomes necessary to fix the schedule for the distribution of available supplies between the various shareholders indicating their turn and the time. This turn system is called "Osrabandi" in Uttar Pradesh and "Warabandi" in Punjab and is governed by rules framed under the Northern Indian Canal and Drainage Act The turn system under each outlet may either be agreed mutually among the shareholders themselves or the canal officer may frame the schedule for them according to the rules and procedures prescribed under the canal Act. The turn generally begins with the first holding at the head of the water course and ends at the one at tail-end The time of each farmer's turn is proportionate to his area in the command of the outlet It becomes difficult in practice for the co-sharer to agree on turns and quantity of water and framing of a formal "Warabandi" thus becomes necessary. In the command areas in the Southern India, however, the practice is not followed because of the localisation pattern of cropping or block system of irrigation in which case the time and volume of water is controlled to certain extent by the type of crop prescribed to be grown under these two systems. The farmers are prohibited under the Act to grow any other crop, other than those prescribed under the localisation pattern or the block system in terms of irrigated and irrigated-dry crops so that the requirement of water for the crops is automatically controlled However, whatever may be the system of distribution, the problem of supplying water to the farms at the tail-end of the canals has become very acute in all the command areas. This is on account of general constraints in the conveyance system and defficiencies in the planning of irrigation projects.

7. *Intensities of Irrigation.* In formulating irrigation schemes, it is very important to adopt a correct intensity of irrigation. *i e.*, the sum total of

the area irrigated under different crops in a year expressed as a percentage of the cultivable command area The older irrigation projects in north India utilised the run-of-the-river flows and were designed for low intensities in order to irrigate as large an area as possible. These canal systems have been remodelled from time to time and the intensities obtaining on them have improved The irrigation schemes in the deltas were designed to irrigate rice throughout the ayacut in the Kharif season. During the post monsoon period, the available river flow was utilised to irrigate part of the ayacut and thus intensity of over 100 per cent was achieved

The determination of a suitable intensity involves careful consideration of various factors such as, the amount and the nature of available water supply, soil, climate, depth of groundwater table, natural drainage and socio-economic conditions like preference for crops Where availability of water is not a limiting factor, the adoption of high intensities is obviously called for High intensities help the farmer to derive the maximum economic benefit from the land and provide continuous gainful agricultural employment if the soils are suitable and the groundwater table is low enough to preclude the risk of water-logging The raising of more than one irrigated crop in any part of the command area leads to the better use of inputs like seeds, fertilisers, pesticides, insecticides and improved implements and also of residual soil moisture from the previous crop

Intensities in the alluvial plains have to be considered in the light of their drainage conditions. Where the natural drainage is sluggish because of flat slopes, groundwater table is likely to be already high Adoption of high intensities with surface water in such areas is fraught with the risk of water-logging The best way of attaining high intensities of, say, more than 100 per cent in such areas is by making conjunctive use of surface and ground-water accompanied by an efficient system of surface drainage

8 Consolidation and Realignment of Field Boundaries The small size and fragmented holdings are a major handicap in preparing plans for sound soil and water management The existing farm holdings are generally of various sizes and shapes to form suitable irrigation units Often they are scattered within a village and run along the slope The water courses constructed on the field boundaries are exceptionally long and narrow. They seep, leak and overflow whenever water passes through them creating scattered pools of water. In such situations, realignment of field boundaries and consolidation holdings become necessary to have a pattern of plots in which irrigation water can be controlled and distributed for efficient application

The consolidation of holdings in irrigated farming has several advantages. The cultivated land occupied by the irrigation distribution system as well as by drainage channels is much less. Waste lands and lands which are under borrow pits, meandering nalas, water pools, etc can be converted into cultivated land In the Chambal Command area, it has been found that there

is a total gain of 10 to 20 per cent of cultivated land by land consolidation. The value of the land thus gained will more than offset the cost of the consolidation work

To facilitate consolidation of holdings and realignment of boundaries and to give legal sanction to such modifications, it is necessary that suitable amendments are incorporated in the existing legislation on soil and water conservation in the states This has been done in the state of Madhya Pradesh

It has been found that when land consolidation is undertaken as a part of a complete and wider land development process, there is little hesitation on the part of majority of the farmers in agreeing to it Those with the largest number of scattered plots are the most eager for consolidation and, therefore, can be used to persuade others to join the consolidation programme The position of previous holdings sometimes comes into the picture as this may affect its value. The question of soil quality has so far not emerged as a serious problem in land reallocation As far as possible, while reallocating land, a farmer is given land at a place where most of his land was situated before. After development, all holdings should have access to irrigation water, drainage and roads All are graded and laid out in the same manner and have almost exactly the same production capability per unit area. For this, it is necessary that consolidation of holding is done in cooperation with the land development agency Once the irrigation layout is finalised, the boundaries of the new consolidated holdings have to be drawn up. There may be a situation where after land development with independent irrigation and drainage channel, the total land available for allotment to a farmer may be slightly less than his original holding In such situations, it will be necessary to decide as a policy matter, whether government lands are to be distributed on a pro-rata basis and sold off to all the farmers to compensate them for the land lost under common drains and water courses or whether government land should also be consolidated with a view to future sale as farm units

When consolidation and realignment of boundaries plans are proposed, they should be discussed with the farmers and their approval obtained wherever possible. Arrangements will also have to be made with the local revenue staff for physical distribution of land showing each farmer his new holding. The new land boundaries should be made legal as soon as possible after devevlopment of the land to retain the confidence of the farmers and to avoid arguments and disputes Work on land consolidation has been done with the consent of the farmers under the soil and water management programme in the Chambal and Tawa command areas.

9. *Infrastructure and Processing Industries.* It is not enough to provide water to the beneficiaries in the command to maximise the project benefits. There should be incentive to encourage them to optimise the yields

of crops. These incentives could be provided through the provision of roads, markets and support price In most command areas provision for roads and markets is non-existent. Lack of communication hinders supply of inputs, movement of marketable produce, etc This has an adverse effect on production Similarly local markets at convenient points and at convenient distances would help in quick disposal of produce and accrual of timely income to the farmers for procurement of seeds, fertilizer, etc for the next crop season. He would also then be able to utilise the facilities, required by him for on-farm development.

Identification of focal points like growth centres, service centres and central villages and their respective zones of influences in the command area will accelerate the process of growth and development In these centres, provision has to be made for meeting farmers' needs for agricultural inputs and storage facilities and processing industries. Action along these lines would encourage the farmer to use water more efficiently and to overcome the problems of under or over utilisation commonly observed in the command areas

10. On-farm Development Role of Banks. As discussed in an earlier section, on-farm development to ensure even flow of water is an important aspect of command area development programmes. This involves heavy expenditure on a number of items These items of expenditure could be met by the government by way of facilities for loan to the beneficiaries farmers. However, in view of the constraints on government resources and the fact that these items of expenditure could be supported by banks, they have been left to be taken care of by financial institutions The quantum of expenditure required for a compact area is worked out and assigned to the banks on an area basis, after a detailed survey, keeping in mind the differences in the nature of development, For example, a few acres in a selected area might require a level of expenditure disproportionate to those on others In such cases, a differential basis of assessment may be warranted.

Applications for loan from the banks are prepared in respect of each farmer The CADA, through its extension staff may assist the banks Applications are prepared indicating that prospective beneficiaries have the title of the land and they are also prepared to own the debt individually But it is often likely that in a given area, there are some cultivators who are unable to establish their title, there may also be others who are indifferent to any borrowing The development on such lands cannot be postponed as it will hamper the process of development in the whole area selected and affect the interest of those farmers who are willing to develop their lands Banks will not take the risk of financing the unwilling or ineligible farmers as in such cases payback is not ensured

ELIGIBILITY OF FARMERS

When the banks undertake to provide loan to the farmers, the eligibility for such a loan will have to be looked into. Apart from correct title to the land for eligibility, the emphasis is not on the value of collaterial or other type of security available. The emphasis is on the cash flow that will be generated as a result of the investment and whether this is adequate to ensure repayment in a given period of time. To determine the repayment capacity, the incremental income is worked out and allowance made for the retention of a part of this for improving living standards of the borrower On the items of expenditure are reckoned the debt service the borrower has to make, the taxes he has to pay, the cost of current cultivation operations, etc. care is also taken to see that the CADA does not load the farmers with unnecessary overheads, The Government of India and the Agricultural Refinance and Development Corporation (ARDC) have evolved a scheme for financing the ineligible farmers through special loan account. So far an aggregate sum of Rs 152 lakhs have been contributed by the Government of India and the state governments of Rajasthan, Andhra Pradesh, Maharashtra and Madhya Pradesh towards the account.

The bank including the cooperatives provide financing facilities to the farmers for on-farm development at 10½ per cent rate of interest per annum. In addition, there is a provision for charging ½ per cent, once for all, evaluation fee which has to be passed on to the executing agency. Normally the Agro-industries Development Corporation in the States execute the on-farm development schemes. The commercial banks, however, show preference for agricultural loans not exceeding for a period of ten years. Eighty per cent of the advances given by commercial banks to the cultivators for land development projects are reimbursed by the ARDC at the rate of 7½ per cent interest In otherwords, commercial banks invest only 20 per cent of their own funds on on-farm works. However, while repayment to ARDC will have to be made by commercial banks on due date, looking to the general repayment performance on this account, there is every likelihood that repayment may not be made by cultivators to the banks on due date The recovery of on-farm loans from the cultivators is the responsibility of the individual commercial banks Although 80 per cent reimbursement from the ARDC will ease the financial burden of the banks at the time of advancement, if the repayment of loan instalments by the cultivators is not prompt, the timely repayment of instalments by the financing banks to the ARDC would decidedly put a strain on the financial base of the banks. Recovery of overdues is one of the major problems faced by the Command areas

Of the five Command Area Development Projects, in which ARDC is participating in the systematic land development project, two are in Rajasthan, one each is in Andhra pradesh and Madhya Pradesh. The Maharashtra Irrigation and Command Area Development Composite Project was

sanctioned by the IDA and the ARDC has finalised the Loaning Programme last year.

In the Rajasthan Canal Command Area Development Project, estimates in respect of 621 "chaks" have been approved by ARDC and the Rajasthan Land Development Corporation (RLDC) has accorded financial sanction in respect of 524 "chaks". The work has commenced in 379 "chaks". Under the Chambal Command Area Development Project, 13 catchment areas have been approved and technical clearance has been accorded by ARDC in respect of 8 schemes. Under the Andhra Pradesh Irrigation and Command Area Development Composite Project, ARDC has sanctioned land development Programme for Rs 2 3 crores In Maharashtra IDB has sanctioned irrigation development over a period of four years This project is IDA's first major involvement in the drought-prone central Deccan region. Statistics showing the State-wise and item-wise financial assistance under grant, loan, capital and special loan assistance for the period from 1974 to 1978 (consolidated) are furnished in Appendix 10 Similar statistics for each year from 1974-75, 1975-76, 1976-77, 1977-78 and 1978-79 are given in Appendices 11, 12, 13, 14, and 15

11 Agricultural Extension in the Command Areas The vital role of extension in the agricultural development programmes of the command areas has attracted the special attention not only of the command area authorities but also of the Central and State Governments resulting in a new approach to extension based on the Training and Visit (T and V) system

The T and V system emphasised that the extension service should have a single line of command so that there are no conflicting instructions to the extension workers They are expected to attend only to agricultural extension work more intensively to produce visible results The responsibilities of extension service and input supply agencies are clearly delineated. The extension service has only to help the input supplying agencies by assessing farmer's demands for different inputs

Under this system, the extension service must recommend only the relevant and specific technology to the farmers to win their confidence. This has been taken care of by linking research with extension through a programme of adaptive research on farmers' field. There is also provision for a cell for monitoring the system so that the results are evaluated continuously and improvement and experiences gained in the implementation

In T and V system, training of field staff is the strongest component. Regular training programmes are organised to provide continuous learning experience to all field functionaries in agricultural technology. Visit by VLWs to the farmers field is the second most important component of this system. The VLWs are required to visit the field and render technical advice to the contact farmers and other farmers in the specified area on the basis of his fortnightly training.

A recent study by the National Institute of Rural Development for the purpose of assessing the efficacy of the T and V system in Morena (Madhya Pradesh) and Kota (Rajasthan) has pointed out the reorganisation of extension system along this new method has produced impressive results in these command areas perhaps because of dedication and pains-taking efforts made by a few selected officers Several lacunae, however, have been identified for initiating corrective measures. Some of these which are important are. deployment of specialist staff, support from research institutions and adequate arrangement for providing information to the farmers, training support for the staff and development of training content based on the live-field situation, careful selection of contact farmers and timely availability of inputs.[6]

The command areas in Andhra Pradesh and several other states have introduced T and V system of extension but best results are achieved where single-line administration, one of the chief pre-requisites of this system, has been introduced for implementation of extension programme in the command areas.

12. Integrated Area Development Approach As already indicated in an earlier section, the command area development has to be conceptually a comprehensive plan embracing all activities of development of the area executed by a single authority. Thus, a shift in the emphasis of the programme is called for from merely being an irrigation command development to a comprehensive and integrated area development programme. Such an integrated development programme requires detailed action in several disciplines like irrigation, agriculture, soil conservation, extension and cooperation along with due support from credit and service organisations. The operations of the CADA are bound to become huge, unwildly and complicated as in a large modern industry. There is, therefore, the greatest need for coordination of activities of the various departments concerned of the Centre and of State levels and also within the command area itself.

13. Problems of Command Areas. Though conceptually well meant, the organisational arrangements in the command areas have not been as effective as they should have been. In many command areas, the authority at the State level has no effective control on planning, resources or execution. The net result has been delay in the implementation of programmes

For making an appraisal of the up-to-date performance and for identifying the problems which have contributed to delay, a number of studies were done in the command areas of Nagarjuna Sagar Gandak (Bihar), Kasi, Malaprabha, Kallad, Tawa, Rajasthan canal and Kangsabati. Some of the major findings are discussed below.

6. Jaiswal N K. Kolte N.V., and Arya H.P S , "Management of Irrigation — A Study of T & V System in Rajasthan and Madhya Pradesh", Behavioural Sciences and Rural Development, Vol I, No 2, 1978

The main reason for the delays in construction of these projects has been inadequacy of funds In some cases like Kallad and Kangsabati, the funds allotted were so inadequate that definite programmes could be drawn up for the completion within the time schedule The consequent extension in the period of constructions resulted in the increase in project cost which took place in the meantime due to escalation in prices.

Inadequacy of funds has not been the only factor contributing to delay There are other factors also as indicated below:

i) *Proliferation Projects :* It is seen that increase in the number of projects in states has resulted in the available resources being spread too thin over all the projects with consequent detriment to the on-going projects which would have given results much earlier had more money been allotted to them. This happened largely due to pressure from public at large for development and extension of irrigation. Lately, however, the Central Government has been able to create some awareness in the matter and advise the States to concentrate investment on the on-going projects to achieve early accrual of benefits.

ii) *Escalation in Costs ·* It is a matter of common knowledge that there was a large-scale rise in the cost of all items, such as, labour, material, equipment, spares, land, etc , which go to form that construction cost of projects.

iii) *Lack of Thorough Investigation .* It is seen that there has been substantial increases in the quantities of work executed due to surprises encounted in foundations, etc during implementation. To overcome this difficulty, it is proposed to associate the Central Water Commission with investigation of major irrigation projects Before taking up the work on the main components of the project the states are now allowed to take up preliminary work on approach roads, colonies, etc. up to 5 per cent of the project cost. Side by side, detailed investigation of foundations and sub-soil strata is to be carried out to get a clear picture of the site conditions.

iv) *Delay in Taking Important Decision :* It was observed that in some cases, delays in implementation of the projects took place due to delays in taking decisions on important aspects of the project which arise during implementation. A case in point is the functioning of inter-state Control Boards. Control Boards have been set up on various major projects. The meetings of these Control Boards are few and far between with the result that important decisions are delayed. It is noticed that on projects where standing committees have been appointed to assist the Control Baords, decisions are taken earlier and construction work does not get impeded.

v) *Difficulties in Land Acquisition* It is a constant complaint of the Construction Engineers that they are unable to get possession of lands in time for taking up work relating to the various components of the project There have been many instances where the construction of a particular branch or distribution system was completed, but the benefits could not accrue because of a few gaps which had to be left in the channels here and there because of the difficulties in acquiring lands. Some measures need to be devised for shortening land acquisition procedures to obtain possession of land required for construction purposes.

vi) *Non-availability of Scarce Materials* · In the past there have been considerable delays practically in every project due to difficulties in procurement of materials needed for the project Fortunately, there was some improvement in this regard during the last few years. Of late however, shortage in cement,etc , are again being felt. To some extent. temporary stages are inevitable in a developing country like ours For avoiding delays on this account, detailed advance planning with regard to procurement of materials and equipment is called for.

vii) *Changes in the Scope of Projects* · The studies undertaken have revealed that in many cases, the construction schedules were upset on account of addition of components like drainage, distributaries, embankments, etc which were not included in the original project In many cases, such changes in the scope of the project during implementation would have been avoided had the project been investigated and planned thoroughly in the first instance These additional works resulted in steep escalation of project cost as well as extended the period of construction.

viii) *Lack of Monitoring Organisation* Lack of adequate evaluation inputs in many cases, led to avoidable delays in consturuction. Had there been a regular system of monitoring the progress in construction, the delays which occurred in a number of cases could have been avoided by taking timely action with regard to potential bottlenecks. Of late, there has been an attempt to rectify this deficiency by establishing a central monitoring organisation to keep a close watch on the performance of command areas In order that the monitoring work is done efficiently, it is essential to have counterpart set-ups in the States, both at the State Headquarters as well as at the Project level so that the progress of implemention of various schemes and the problems encountered in execution are kept constantly under review and action taken promptly to prevent delays

ix) *Lack of Detailed Plan and Assessment for Distribution System and Structures on Them* . It has been seen that in many cases, there

were no detailed investigations done before taking up the work on execution of canal systems. Due to lack of detailed plans for distribution systems, the work on their execution lagged behind and the accrual of benefit was delayed During the investigation stage, the tendency is to concentrate attention on investigations for major aspects of the projects like the dam or barrage, and relatively very little attention is paid to investigations on Canal systems. The need for detailed and thorough investigations have been repeatedly stressed. The State Governments have been asked to establish a broad based, multi-disciplinary organisation for investigations of new schemes

x) *Failure to Update Estimates in time and to keep the State Governments informed of the rise in Cost of Projects* There has been no serious effort towards updating the cost estimates of projects at regular intervals. Due to non-availability of information about updated costs, the financial planning in many cases has gone wrong. In the absence of information about revised cost of project, the Finance Department of the States often finds it difficult to sanction proposals of the project authorities with regard to additional items of estimates, additional staff, etc These difficulties could be obviated if there is a regular system of updating the cost estimates For the last few years, the Government of India have been stressing on the State Governments the need to set up cost control cells in command areas which would keep continuous track of actual cost by obtaining data for various items to suggest measures, wherever possible, either for effecting savings or increasing expenditure

In the quarter century of irrigation development, we have exploited project sites which were more suitable and posed minimum number of problems. Future projects are likely to be in more difficult terrain and would involve solution of many complex problems. For execution of such projects, we have to be better equipped with regard to planning, organisational skills and management techniques, apart from ensuring adequate financial resources for such projects. For ensuring success of future programme, the Central Government should have a close rapport with the State Governments who are entrusted with the responsibility of execution of the schemes For ensuring continuity of development, a shelf of well-investigated project is necessary in order to ensure that there are enough projects in the pipeline. For efficient implementation of future programmes in the command areas, conserted efforts are needed to bringabout improvements in all aspects of project implementation. It is only after we have made a breakthrough in improving our implementational

framework that we can expect construction delays to be a thing of the past

xi) *Potential and Actual C.C.A :* It has often been the experience that the Culturable Command Area (CCA) to be covered under the water distribution system as envisaged while formulating the command area project varies considerably from the actual area under the outlets. Generally it is found that the actual area is lower than the area envisaged. This has happened in the Kosi, Chambal and Pochampad (Ramsagar Project) command areas. In order to have a realistic picture of how much area would benefit, it would be desirable to have a distributary or minor-wise review of actual area served and potential created.

xii) *Non-realisation of Expected Benefits :* The reasons for full benefits not being realised are many. Some of them are stated in the following paras :

The anticipated crop pattern and water allowances in many command areas are not being realised. The reason is that when an irrigation project is drawn up, the most suited crop pattern and water requirements are no doubt evolved in consultation, with Agriculture Department. The project authorities, however, are not in a position to enforce that crop pattern everywhere in the command A different crop pattern actually developed based on the perception of benefit by the farmers, may not be able to get the full irrigation requirements with the original water allocation. In the case of many command areas, the crop patterns actually developed widely differ from those originally contemplated. It is also found that originally proposed water duties are unworkable in many cases.

The consturction of field channels in many cases has not kept pace with the water availability facility. It is a common experience in all command areas that the requisite response from the farmers for construction of field channels is not forthcoming The reasons attributed to these are the lack of spirit of cooperation among the beneficiaries, lack of funds particularly, with small and marginal farmers, lack of expertise to construct culverts and other structures and an expectation on the part of the farmers that the Government might come to their assistance by subsidy if they hold out long enough. Now the situation is sought to be tackled by the participation of financial institutions and even World Bank is coming forward to help the State Governments to overcome the difficulty of shortage of funds.

An important reason for contemplated benefits not being realised is the inadequate preperation of land for irrigated agriculture Land shaping and making of "Kiaries" are very necessary. The diffi-

culties associated with this type of work has been discussed in greater detail in an earlier section

The operation and maintenance of irrigation and drainage systems are being neglected in almost all command areas. The general complaint of the command area development authorities is that adequate funds are not available to carry out the maintenance satisfactorily Consequently, the system cannot be operated with reasonable efficiency. The irrigation programme suffers and full benefits are not realised.

In some states, as for instance in Andhra Pradesh, the operation and maintenance of the irrigation system in command areas is not vested with command area development authority but with the Department of Irrigation A dichotomy of this kind is not conducive to the functioning of the command area development authority. The operation and maintenance work should be transferred to the command area development authority to ensure complete control on all aspects.

Maldistribution of available supplies of water and the difficulties faced by the tail-end cultivators on account of this is another problem Due to wastage and overuse of water in upper reaches of the distribution system, the tail-end cultivators are often left without adequate water Also the distribution system in a number of projects has not been designed to meet the water requirements of high-yielding varieties of crops both in respect of quantity and time-schedule The control structures, such as, cross regulations and escapes are not adequate and efficient for functioning of canal system. In order to remedy this situation, review of design of the distribution system in the command areas needs to be urgently taken up so that constraints of this type could be removed by a phased programme of modernisation.

Agricultural production requires a number of inputs and irrigation is only one of them Adequate supply of better inputs such as improved seeds, fertilizer, weedicides, pesticides, etc are to be supplied to the cultivators to enable them to adopt modern agriculture. Lack of credit facilities on reasonable terms is a difficulty felt by the farmers. Infrastructure facilities like roads, markets and storages are also required and there is a need for simultaneous provision of these facilities. Often lack of one or more of these have discouraged the farmers from taking to irrigated agriculture

A general difficulty which has come to notice is the relationship which exists between the engineering and agricultural personnel working in the command areas Of course, the constitution of

CADA with a single line of command is supposed to over-come the friction in this relationship This however, is slow to happen. With better training, appreciation for each others role and administrative coordination the situation will improve.

xiii) *Delegation of Power :* In some command areas, delegation of powers to carry out engineering programme is not adequate at the various levels This is particularly so in the cases where CAD Authority has not been constituted and the command area programmes are still managed by the Department. There is a need to increase the powers for technical sanction, powers for accepting tenders, powers for sanctioning extra items, etc These powers were fixed years ago when the price levels were substantially low. Thus from the point of view of price escalation alone increased delegation of powers is justified. There is also the additional justification of achieving efficiency and speed in performance to the extent it is related to delegation of financial powers. Further, over a period of years, the departments in the states have been able to develop the necessary engineering expertise on various aspects. Therefore, increased delegation of technical responsibilities also should not present a problem.

xiv) *Personnel Planning .* In view of the heavy investment of resources in the command areas, there is a need for reviewing personnel policies in the context of acceleration of development and utilisation of irrigation. All the aspects of recruitment, training and deployment should be reviewed. The acceleration of the programme will require a large number of technical personnel at lower level, such as, junior engineers, overseers and other technical personnel like works inspectors, mechanics, foremen, operators and the like. It is necessary, therefore, to evolve training programmes for these categories of personnel at the departmental level and through Industrial Training Institutes or Engineering Staff Colleges Short-term on-the-job training courses on the project site may also be useful. Besides engineering skill, it may be necessary for senior officers to be trained in the various management techniques employed in the implementation of the projects through refresher course.

A large number of training courses are being organised by the Department of Personnel and Administrative Reforms of the Government of India, the National Institute of Rural Development and the Administrative Staff College of India, the Indian Institute of Public Administration, the Central Water Commission and the State Administrative or Engineering Colleges on various aspects of planning, implementation and management with special reference to irrigation in command areas. Maximum advantages of such

training courses may be taken by deputing officers from the command areas to these courses in as large a number as practicable

14 Strategy for Future Development The third conference of the State Ministers of irrigation which took place towards the close of 1977 has clearly defined the strategy of future development of irrigation in respect of command areas In the programmes undertaken so far, stress has been mainly on extension of irrigation to new areas. Relatively less attention was given to the problem of optimising the benefits from the existing irrigation projects It is only recently that the subject has started receiving attention This lopsidedness in planning is now proposed to be corrected in the Sixth Five-year Plan period by a two-pronged strategy as stated below

i) Creation of additional irrigation potential by completing on-going and new Projects, and

ii) effecting more efficient use of water available in the existing irrigation system

For increasing the tempo of irrigation development which has considerable significance for rural development as envisaged in the Sixth Plan, careful selection of new projects and phasing of construction would be necessary so that there is correct balance in each state between on-going and new projects and resources are not spread too thin and best results are achieved with the available resources Each state will have to Plan a proper strategy so that all the inputs including finance are worked out carefully and deployed from year to year The stepping up of the pace of irrigation development is sought to be intimately linked with implementation framework.

Efficient water use and avoidence of wastage is the very essence of command area programme The problems have already been highlighted in the earlier sections The importance of on-farm development and drainage have been stressed, and together with cropping pattern and other ancillary measures, efficiency of water use is sought to be improved In the coming years, massive efforts would be required to formulate appropriate modernisation schemes and to implement them, in a timebound manner The Central Water Utilisation Scheme constituted by the Central Water Commission will review the modernisation programmes in the command areas and render necessary advice to the command area development authorities.

Information on potential created and utilized in irrigation projects for command area development launched by the Government of India is furnished in Appendix 16 It includes an abstract which gives the All-India picture at a glance *

* The statistics furnished in the appendices were received through the Courtesy of the Water Management Division of the Department of Agriculture, Ministry of Agriculture and Irrigation, Government of India, New Delhi. The author is grateful to Shri Vijay Prakash, Deputy Commissioner (W M) for his help in this regard

Appendix 1

STATE-WISE LIST OF COMMAND AREA DEVELOPMENT AUTHORITIES

S No	Name	Irrigation Projects included	Designation & Location
1	2	3	4
I	*Andhra Pradesh*		
1	Nagarjunasagar Left Bank Canal	1a) Nagarjunasagar Left Bank Canal	Administrator, Nagarjunasagar Project, Left Bank Canal, Tekulappal[1] Camp, Near *Khammam*, (A P)
2	Nagarjunasagar Right Bank Canal	1b) Nagarjunasagar Right Bank Canal	Administrator, Nagarjunasagar Project, Right Bank Canal, CADA, *Guntur* (A P)
3	Pochampad	2) Pochampad	Administrator, Pochampad CAD Project, *Jagtial*, Karimnagar (A P)
4	Tungabhadra Projeet Complex	3) K C Canal 4) Rajoli Bunda Diversion Scheme 5) *Tungabhadra* a) H L Canal b) L L. Canal	Administrator, Tungabhadra CAD Project, Ramnagar, *Anantapur* (A P) 515 001
II	*Bihar*		
5	Gandak Area Dev Agency	6) Eastern Gandak	Chairman & Area Dev Commissioner, Gandak CAD Agency, *Muzaffarpur*, Bihar GRAM — GADA PEX — 30 PIN — 842 001
6	Kiul-Badua-Chandan Command Area Dev Agency	7) Badua 8) Chandan 9) Kiul	Chairman & Area Dev Commissioner, Kiul Badua Chandan CAD Agency, *Bhagalpur*, Bihar
7.	Kosi Command Area Dev Agency	10) Kosi	Chairman & Area Dev. Commissioner, Kosi Command Area Dev Agency, *Saharsa*, Bihar.
8	Sone Command Area Dev. Agency	11) Sone Canal system a) Barrage b) High Level Canal	Area Development Commissioner, Sone Command Area Dev. Agency, Patna Commissioner's Office, *Patna*, Bihar.

Appendix 1 — (*Contd*)

1	2	3	4
III	*Gujarat*		
9	Kadana Project CADA	12a) Mahi Stage I 12b) Mahi Stage II 13) *Shetrunji* a) Palitana (Major) b) Khodiyar (Medium)	Area Development Commissioner, Mahi-Kadana Command Area, Gita Niwas, Kailash Society Ashram Road, *Ahmedabad*, Gujarat
10	Ukai-Kakrapar Proj CADA	14a) Ukai 14b) Kakrapar	Area Development Commissioner, Ukai-Kakrapar Project, Aradhana, Athwa Lines, *Surat*, Gujarat.
IV	*Haryana*		
11	CADA, Gurgaon	15) Gurgaon Canal	Chief Project Officer CADA, Gurgaon Canal, Gurgaon (Haryana)
12	CADA, Narnaul Mohindergarh	16) Pt J L Nehru Lift Irrigation Scheme	Chief Project Officer, CADA, Narnaul, Opp I T I *Mohindergarh*. Haryana
13	CADA, Bhiwani	17) Jui Lift Irr Seheme	Chief Project Officer, CADA, Jui Lift Irri Scheme, Mini Sectt. Room No 69, *Bhiwani*.
14	CADA, Rohtak	18) Rewari Lift Irr Scheme	Chief Project Officer CADA, Rewari Lift Irri Scheme, 800, Green Road, Shakti Nagar near Tehsil Office, *Rohtak*, Haryana 125 001
V	*Jammu & Kashmir*		
15	Ravi—Tawi Command Area Authority	19) Tawi Lift Irrigation Scheme	Area Development Commissioner, Ravi-Tawi Command Area Project, New Sectt Jammu, J & K.
VI	*Karnataka*		
16	Cauveri Basin Project	20) Krishnarajasagar & V Canal	Administrator, Cauveri Basin Proj *Mysore*, Karnataka
17	Malaprabha & Ghataprabha, CADA	21) Ghataprabha 22) Malaprabha	Administrator, Malaprabha and Ghataprabha. *Belgaum*, P B No 112, Karnataka – 590 002

Appendix 1 — (*Contd*)

1	2	3	4
18	CADA Tungabhadra Project	23) *Tungabhadra* a) Left Bank Canal b) Right Bank Canal c) High Level Canal	Chairman & Administrator, CADA Tungabhadra Proj , *Munirabad*-583 233, Karnataka
19	CADA Upper Krishna Project	24) Upper Krishna	Administrator, CADA, Upper Krishna Project, Aiwan-E-Shahi Road, *Gulbarga*, Karnataka 585 102
VII	*Kerala*		
20	Kerala CADA	25) Chalakudi 26) Malampuzha 27) Peechi	Special Officer, CAD Authority Civil Sectt , *Trivandrum*, Kerala.
VIII.	*Madhya Pradesh*		
21	Chambal Ayacut Dev Authority	28) Chambal	Commissioner, Chambal Ayacut Development, *Gwalior*, M P
22	Tawa Ayacut Development Authority	29) Tawa	Commissioner, Tawa Ayacut Development, Near Vittal Market, Arera Colony, *Bhopal*, M P
IX	*Maharashtra*		
23.	Bagh, Itiadoh & Pench CADA	30) Bagh 31) Itiadoh	Administrator, CADA for Bagh, Itiadoh, Pench, Projects, *Nagpur*
24	CAD Authority Ghod Bhima Projects	32) Bhima 33) Ghod	Administrator, CADA for Ghod Bhima Proj. *Poona*-1, Maharashtra.
25	CADA for Purna Jayakwadi Project	34) Jayakwadi 35) Purna	Administrator, CADA for Purna Jayakwadi Projects, MSFC Buildings, Opposite Fire Station Road, *Aurangabad*,
26	Girna and Upper Tapi (Hatnur) CAD Authority	36) Girna 37) Upper Tapi Stage I	Administrator, CADA Girna & Upper Tapi Projects (Hatnur), *Jalgaon*, Maharashtra, 425 001
27	CADA for Krishna Project	38) Krishna	Administrator, CADA for Krishna Project, *Satara*, Maharashtra

Appendix 1 — (*Contd*)

1	2	3	4
X	*Orissa*		
28	Hirakud CADA	39) Hirakud Dam Project	Chairman, CADA and DivisionalCommissioner, Northern Division, *Sambalpur*, Orissa Project Director, CADA, Hirakud Dam Project, Sambalpur–768 001 Orissa
29	CADA for Mahanadi Delta (old) Cuttack	40a) Mahanadi Delta	Chairman, CADA & Divisional Commissioner, Central Revenue Division, *Cuttack*, Orissa Project Director, CADA, Mahanadi Delta (Cuttack Br) *Cuttack*, Orissa
30	CADA for Puri Delta, Puri	40b) Mahanadi Delta (Puri)	Project Director, CADA, Mahanadi Delta, *Puri*, Orissa
31	Salandi CADA	41) Salandi Irrigation Project	Chairman, CADA Divisional Commissioner, Central Revenue Division, *Cuttack*, Orissa Project Director, CADA, Salandi, *Bhadrak*, Orissa.
XI	*Rajasthan*		
32	Chambal CAD	42) Chambal	Area Development Commissioner, CADA Chambal Project, Civil Lines, *Kota*, Rajasthan.
33	Rajasthan Canal Project CADA	43) Rajasthan Canal Stage I 44a) Bakra & b) Gang Canal	Area Development Commissioner, CADA Rajasthan Canal Project, *Bikaner*, Rajasthan
XII	*Uttar Pradesh*		
34	Gandak	45) Western Gandak	Commissioner & Administrator, CADA Gandak Project, Civil Lines, *Gorakhpur*, U P.
35	Ramganga	46) Ramganga	Commissioner & Administrator, CADA Ramganga, 3A/101, Azad Nagar, *Kanpur*. 205 002, U. P

Appendix 1 — (*Contd*)

1	2	3	4
36	CADA Sarda Sahayak	47) Sarda Sahayak	Commissioner & Administrator, CADA, Sarda Sahayak Project, Room No 142, 1st Floor (South Wing), Jawahar Bhawan, *Lucknow*-226 001, U P
XIII.	*West Bengal*		
37	Damodar Valley Canal System	48) DVC System	Administrator, CADA DVC System, Kalna Road, (Bedamtala) P O & District *Burdwan*, West Bengal
38	Kangsbati CADA	49) Kangsbati	Administrator, CADA Kangsbati, C/o Jt Director of Agriculture, P O & Distt *Bankura*, West Bengal
39	Mayurakshi CADA	50) Mayurakshi	Administrator, CADA, Mayurakshi, P O Suri, District *Birbhum*, West Bengal

Appendix 2

IRRIGATION PROJECTS FOR WHICH CAD AUTHORITIES HAVE NOT BEEN FORMED

Name of the State	Name of the Irrigation Project
Assam	1 Jamuna
Madhya Pradesh	2 Barna
	3 Hali
	4 Hasdeo Tank
	5 Kharung Tank
	6 Maniyari Tank
Manipur	7 Loktak Lift Scheme
Tamil Nadu	8 Cauvery System
	9 Lower Bhavani
	10 Periyar Vaigai

Appendix 3

STATE-WISE AND YEAR-WISE PROGRESS OF LAND DEVELOPMENT (LEVELLING/SHAPING WORKS) UNDER CAD PROGRAMME UP TO MARCH, 1978

('000 *ha*)

State	IV Plan	1974–75	1975-76	1976–77	1977–78	Total of V Plan	Cumulative total
Andhra Pradesh	—	20 31	1 05	4.51	10 74	36 61	36 61
Assam	—	—	—	—	—	—	—
Bihar	—	0 22	0 32	0 24	0 08	0 86	0.86
Gujarat	11 37	6 48	5 65	8 01	9 69	29 83	41 20
Haryana	—	—	—	0 71	0.60	1 31	1.31
Jammu & Kashmir	—	0 96	0 16	0 41	0 51	2 04	2 04
Karnataka	296 79	23 06	28 08	33 22	25 67	110 03	406 82
Madhya Pradesh	0 70	1 70	2 84	2 54	1 48	8 56	9 26
Maharashtra	108 52	65 12	35 69	29 41	31 93	162 15	270 67
Orissa	—	—	—	—	0 09	0 09	0 09
Rajasthan	—	2 00	0 95	61 48	8 27	12 70	12 70
Uttar Pradesh	—	0 69	0 11	3 33	2 28	5 81	5.81
West Bengal	1 77	0 34	0 15	—	—	0 49	2 26
Total	419 15	120 28	75 00	83 86	91 34	370 48	798 63

Appendix 4

SOIL & WATER MANAGEMENT PILOT PROJECTS

S. No.	Name of the Project/State	Headquarters	Year of sanction	Remarks
1	2	3	4	5
1.	Dohrighat (U. P.)	Dohrighat, Azamgarh	1969-70	Completed
2.	Patiala (Punjab)	Patiala	-do-	do
3.	Tungabhadra (Karnataka)	Bellary	-do-	-do-
4.	Rajasthan Canal (Rajasthan)	Sriganagar	70 71	-do-
5.	Kakrapar (Gujarat)	Suratnagar	do	-do-
6.	Guna (Maharashtra)	Jalgaon	-do	do
7.	Mahanadi Delta (Orissa)	Bhubaneshwar	-do	-do-
8.	Chambal (Rajasthan)	Kota	71-72	-do-
9	Tawa (M. P.)	Hoshangabad	-do-	-do-
10.	Pochampad (A P.)	Jagitial Karimnagar	do-	do-
11.	Kosi (Bihar)	Purnea	72-73	-do-
12.	Gandak (Bihar)	Bettia, West Champaran	-do-	-do-
13.	Purna-Jayakwadi (Maharashtra)	Jalna, Nanded	-do-	-do-
14.	Chambal (Madhya Pradesh)	Morena	do-	-do-
15.	Kangsbati (West Bengal)	Bankura	-do	Continuing
16	Hirakud (Orissa)	Sambalpur	do-	-do-
17.	Western Jamuna Canal (Karnal)	Karnal	-do	Completed
18.	Nayyar (Kerala)	Trivandrum	do-	do-
19.	Gandak (U. P.)	Gorakhpur	73-74	-do-
20.	Mahi Kadana (Gujarat)		-do-	-do-
21.	Malaprabha (Karnataka)	Navalgund	-do	-do-
22.	Sarda Sahayak (U. P)	Rae-Bareli	-do	-do-

Appendix 4 — (*Contd*)

1	2	3	4	5
23	Sone (Bihar)	Dehri-oh-Sone Rohtas	73–74	Continuing
24	Ramganga (U P)	Kanpur	74–75	Completed
25	Pochampad (Andhra Pradesh) Chalgal Farm	Jagtial Karimnagar	75–76	Continuing
26	Jamuna (Assam)	Nowgaon	–do–	–do–
27.	Chandan Reservoir (Bihar)	Tarapur/Monghyr	–do–	–do–
28	Barna (Madhya Pradesh)	Raisen	75–76	–do–
29	Jayakwadi (Maharashtra)	Aurangabad	75–76	–do–
30	Chalakudi (Kerala)	Trichur	76–77	–do–
31	Salandi (Orissa)	Bhadrak, Balasore	76–77	Continuing
32	Ramganga (Mathura–U P)	Mathura	–do–	–do–
33	Periyar Vaigai (Tamil Nadu)	Madurai	–do–	–do–
34	K C Canal (A P)	Nandyal, Kurnool	–do–	–do–
35	Nagarjunasagar Right Bank Canal (A P)	Guntur	–do–	–do–
36	Nagarjunasagar Left Bank Canal (A P)	Khammam	–do–	–do–
37	Hasdeo, Kharung & Maniyari (M P)	Bilaspur	–do–	–do–
38	Sharada Sahayak Command Area Phase I (U P)	Sultanpur	–do–	–do–
39	Tawa Right Bank Canal (M P)	Hoshangabad	–do–	–do–
40	Tawa Lift Irrigation (J & K)	Jammu	–do–	–do–
41	Shetrunji (Gujarat)	Bhavnagar	–do–	–do–
42	Itiadoh Irrigation Command (Maharashtra)	Bhadara	–do–	–do–
43	Krishna Canal Dhom (Maharashtra)	Satara	–do–	–do–
44	Bhima (Maharashtra)	Solapur	–do–	–do–
45	Western Gandak (U P)	Deoria	–do–	–do–

46	Upper Tapi (Maharashtra)	Jalgaon	76-77	Continuing
47	Mahanadi Delta (Orissa)	Puri	-do-	-do-
48	Jui Canal (Haryana)	Bhiwani	-do-	-do-
49	Kosi (Bihar)	Saharsa	-do-	-do-
50	Mayurakshi (West Bengal)	Birbhum	-do-	-do-
51.	D. V. System (West Bengal)	Burdwan	1977-78	-do-

Appendix 5

STATE-WISE AND YEAR-WISE PROGRESS OF SOIL SURVEY WORK UNDER CAD PROGRAMME UP TO MARCH, 1978

('000 *ha.*)

	State	IV Plan	1974–75	1975–76	1976–77	1977–78	Total of V Plan	Cumulative total
1	Andhra Pradesh	380 00	—	—	0 79	19 25	20 04	400 04
2	Assam	—	—	—	—	—	—	—
3.	Bihar	—	14 60	29 48	61 38	27 55	133 01	133 01
4.	Gujarat	673 00	—	—	—	—	—	673 00
5.	Haryana	—	—	—	42 68	83.57	126 25	126 25
6.	Jammu & Kashmir	—	—	—	—	—	—	—
7	Karnataka	803 70	10 80	93 44	83 22	75 61	263 07	1066 77
8	Madhya Pradesh	123 00	67 00	33 40	60 50	67 24	228 14	351 14
9.	Maharashtra	—	—	—	—	—	—	—
10	Orissa	—	—	—	—	47 07	47 07	47 07
11	Rajasthan	54 21	66 18	40 11	45.76	45 50	197 55	251 76
12	Uttar Pradesh	24 00	143 97	167.28	219 16	578 13	1108 54	1132 54
13	West Bengal	7 06	8 80	7 80	8 00	2 67	27 27	34 33
	Total	2064 97	311 35	371 51	521 49	946 59	2150 64	4215 91

Appendix 6

STATE-WISE AND YEAR-WISE PROGRESS ON TOPOGRAPHICAL SURVEY WORK UNDER CAD PROGRAMME UP TO MARCH 1978

('000 *ha*)

State	IV Plan	1974-75	1975-76	1976-77	1977-78	Total of V Plan	Cumulative Total
Andhra Pradesh		2.05	7.90	18.60	49.62	78.17	78.17
Assam		—	—	—	2.50	2.50	2.50
Bihar		3.50	19.11	72.34	93.60	188.88	188.88
Gujarat	168.12	118.05	61.80	49.37	22.54	251.76	419.88
Haryana	—		—	1.20	0.27	1.47	1.47
Jammu & Kashmir		—	—		2.00	2.00	2.00
Karnataka	39.14	4.74	10.49	44.63	19.00	78.86	118.00
Madhya Pradesh	22.00	6.10	9.68	32.60	14.29	62.67	84.67
Maharashtra	167.82	25.25	32.31	42.79	20.62	120.97	288.79
Orissa		—		—	7.81	7.81	7.81
Rajasthan	—	7.00	51.58	58.39	55.95	175.92	175.92
Uttar Pradesh		11.50	16.37	281.23	201.83	513.98	513.98
West Bengal				—	0.02	0.02	0.02
Total	397.08	178.19	212.57	601.15	493.20	1485.01	1882.09

Appendix 7

STATE-WISE AND YEAR-WISE PROGRAMME OF CONSTRUCTION OF FIELD CHANNEL WORKS UNDER CAD PROGRAMME UP TO MARCH, 1978

('000 *ha*)

State	IV Plan	1974–75	1975–76	1976–77	1977–78	Total of V Plan	Cumulative Total
Andhra Pradesh	—	46 51	1 15	0 44	19 48	67 58	67 58
Assam	—	—	—	1 52	0 89	2 41	2 41
Bihar	—	—	0 26	0 58	0 38	1 22	1 22
Gujarat	101 11	90 18	62 02	55 26	23.46	230 92	332 03
Haryana	—	—	—	—	0 19	0 19	0 19
Jammu & Kashmir	—	4 00	2 00	1 00	3 00	10 00	10 00
Karnataka	510 91	72 09	14 11	23 76	19 84	129 80	640 71
Madhya Pradesh	0 70	1 70	8 82	20 45	11 20	42 17	42 87
Maharashtra	175 50	29 14	29 20	20 95	33 80	113 09	288 59
Orissa	—	—	—	—	1 01	1 01	1 01
Rajasthan	—	—	1 00	31 70	25 26	57 96	57 96
Uttar Pradesh	—	211 20	35 45	161 08	173 34	581 07	581 07
West Bengal	—	—	—	—	1 56	1 56	1 56
Total	788 22	454 82	154 01	316 74	313 41	1238.98	2027 20

Appendix 8

YEAR-WISE AND STATE-WISE PROGRESS OF LINING OF FIELD CHANNEL WORK UNDER CAD PROGRAMME UP TO MARCH, 1978

('000 *ha*)

State	IV Plan	1974–75	1975–76	1976–77	1977–78	Total of V Plan	Cumulative Total
Andhra Pradesh	—	0 03	—	—	—	0 03	0.03
Assam	—	—	—	—	—	—	—
Bihar	—	—	—	0 11	0 02	0.13	0.13
Gujarat	—	—	—	—	—	—	—
Haryana	—	—	—	0 08	0 04	0.14	0 14
Jammu & Kashmir	—	—	—	—	—	—	—
Karnataka	—	—	0 78	41 41	7 24	49 43	49 43
Madhya Pradesh	—	—	—	—	—	—	—
Maharashtra	—	—	—	—	—	—	—
Orissa	—	—	—	—	0.17	0 17	0 17
Rajasthan	—	—	1.00	31 02	19.93	51.95	51 95
Uttar Pradesh	—	1 40	4 08	8 37	51 10	64 95	64 95
West Bengal	—	—	—	—	—	—	—
Total	—	1 43	5.86	80 99	78 52	166 80	166.80

Appendix 9

STATE-WISE AND YEAR-WISE PROGRESS OF CONSTRUCTION OF FIELD DRAINS WORK UNDER CAD PROGRAMME UP TO MARCH, 1978

('000 *ha*)

State	IV Plan	1974–75	1975–76	1976–77	1977–78	Total of V Plan	Cumulative Total
Andhra Pradesh	—	0 92	1 05	0 25	0 84	3 06	3 06
Assam	—	—	—	0 12	0 25	0 37	0 37
Bihar	—	—	0 16	0 17	0 07	0 40	0 40
Gujarat	1 62	0 08	0 30	0 16	0 03	0 56	2 18
Haryana	—	—	—	—	—	—	—
Jammu & Kashmir	—	—	—	0 10	0 37	0 47	0 47
Karnataka	—	—	—	—	—	—	—
Madhya Pradesh	0 70	1 70	2 83	2 42	1 40	8 35	9 05
Maharashtra	155 04	35 51	24 89	30 28	27.09	117 77	272 81
Orissa	—	—	—	—	0 25	0 25	0 25
Rajasthan	—	—	—	0 16	5 33	5 49	5 49
Uttar Pradesh	—	0 01	5.13	24 87	17 99	48 00	48 00
West Bengal	—	—	—	—	—	—	—
Total	157 36	38 22	34 36	58 53	53 63	184 72	342 08

Appendix 10

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING THE YEAR 1974-78

(*Rs in lakhs*)

State	Grant				Total of col 2 to col 5
	Estt of CAD Authority	Survey, Planning, Design & Supervision of execution of OFD works	Spillover works taken in IV Five-year Plan (Roads & Markets)	Subsidy to small, marginal and disadvantaged farmers	
1	2	3	4	5	6
1. Andhra Pradesh	63 27	74 73	91 35	49 88	282.23
2 Assam	1 00	1 00	—	—	2 00
3 Bihar	35 28	89 70	198 45	539.23	862.66
4 Gujarat	8 41	280 41	252 57	52 81	594 20
5 Haryana	9 95	11 18	—	5 68	26 71
6 Jammu & Kashmir	7 19	1 78	—	9 11	18.08
7 Karnataka	31 96	92 33	—	33 09	157 38
8 Kerala	2.49	1 00	—	—	3 49
9. Madhya Pradesh	13 78	205 13	179 91	14 20	413 02
10 Maharashtra	24 68	269 64	87 00	4 06	385 18
11. Manipur	—	—	—	—	—
12 Orissa	3 80	7 35	53.59	14 00	78.74
13. Rajasthan	167 31	141 89	191 20	30 00	530 40
14. Tamil Nadu	0 50	0 50	—	—	1 00
15 Uttar Pradesh	45 00	306 07	99 76	168 80	519 63
16. West Bengal	7.59	24 83	45 55	33 95	111 92
Total	422 01	1107 54	1202.38	954 71	3986.64

Appendix 10 — (*Contd*)

(*Rs. in lakhs*)

State	Loan			Capital	S. L. A.	Grand Total
	Constn. of field channels	Purchase of equipment	Total of Cols 7 & 8	Equity Capital Support to Land Development Corpn etc.	Special Loan fund for ineligible farmers	
1	7	8	9	10	11	12
1 Andhra Pradesh	45 00	60.00	105 00	95 00	61 00	543.23
2 Assam	8.00	—	8.00	—	—	10 00
3. Bihar	50 00	—	50.00	—	—	912 66
4. Gujarat	327 50	18 93	346 43	—	—	940 63
5. Haryana	32.50	—	32.50	5.00	—	64 21
6. Jummu & Kashmir	1.00	—	1.00	—	—	19 08
7. Karnataka	200.50	55.00	255.50	—	40 00	452.88
8. Kerala	2.50	—	2.50	—	—	5 99
9. Madhya Pradesh	55 00	—	55.00	113 00	14.00	595 02
10. Maharashtra	156.73	—	156.73	100.00	20.00	661 91
11 Manipur	1.00	—	1.00	—	—	1.00
12. Orissa	5.00	—	5.00	—	—	83 74
13. Rajasthan	75.00	—	75.00	175 00	50.00	830.40
14 Tamil Nadu	0.50	—	0.50	—	—	1 50
15. Uttar Pradesh	478.00	—	478.00	266 00	115.00	1378 63
16 West Bengal	32.50	—	32.50	—	—	144 42
Total	1470.73	133 93	1604.66	754 00	300.00	6645.30

Appendix 11

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING 1975

(*Rs in lakhs*)

State	Grant				Total of Col 2 to col 5
	Estt of CAD Authority	Surveys, Planning, Design & Supervision of execution of OFD works	Spillover works taken in IV Five-year Plan (Roads & Markets)	Subsidy to small, marginal and disadvantaged farmers	
1	2	3	4	5	6
1 Andhra Pradesh	4.00	6 00	36 28	—	46.28
2 Assam	—	—	—	—	—
3. Bihar	5 00	12 50	140 26	—	157.76
4 Gujarat	2 19	7 50	215 00	—	224.69
5 Haryana	6 45	—	—	—	6 45
6. Jammu & Kashmir	0 50	—	—	—	0 50
7 Karnataka	1 62	8 88	—	—	10 50
8 Kerala	0 56	—	—	—	0.56
9. Madhya Pradesh	—	—	165 75	—	165 75
10. Maharashtra	3 61	0.77	51 46	—	55 84
11. Manipur	—	—	—	—	—
12. Orissa	—	—	30 60	—	30 60
13 Rajasthan	33 54	—	94 85	—	128 39
14 Tamil Nadu	—	—	—	—	—
15 Uttar Pradesh	6 88	5 80	55 00	—	67 68
16. West Bengal	—	—	15 00	—	15.00
Total	64 35	41 45	804 20	—	910 00

Appendix 11 — (*Contd*)

(*Rs in lakhs*)

State	Loan			Capital	S. L A	Grand Total
	Constn of field channels	Purchase of equipment	Total of Cols 7 & 8	Equity Capital Support to Land Development Corpn. etc	Special Loan fund for ineligible farmers	
1	7	8	9	10	11	12
1. Andhra Pradesh	—	—	—	—	—	46.28
2 Assam	—	—	—	—	—	—
3 Bihar	—	—	—	—	—	157 76
4. Gujarat	—	—	—	—	—	224 69
5. Haryana	—	—	—	—	—	6 45
6 Jammu & Kashmir	—	—	—	—	—	0 50
7 Karnataka	—	—	—	—	—	10 50
8 Kerala	—	—	—	—	—	0 56
9 Madhya Pradesh	—	—	—	—	—	165.75
10 Maharashtra	—	—	—	50 00	—	105.84
11 Manipur	—	—	—	—	—	—
12 Orissa	—	—	—	—	—	30.60
13. Rajasthan	—	—	—	40.00	—	168 39
14 Tamil Nadu	—	—	—	—	—	—
15 Uttar Pradesh	—	—	—	—	—	67.68
16 West Bengal	—	—	—	—	—	15 00
Total	—	—	—	90.00	—	1000.00

Appendix 12

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING 1975-76

(*Rs in lakhs*)

Name of the State	Grant: Estt of C A D Authority	Grant: Surveys, Planning, Design & Supervision of execution of OFD works	Grant: Spill-over works taken in IV Five year Plan (Roads & Markets)	Subsidy to small, marginal and disadvantaged farmers	Total of Col 2 to Col 5
1	2	3	4	5	6
1 Andhra Pradesh	8 01	9 85	58.07	—	75 93
2. Assam	—	—	—	—	—
3. Bihar	9 50	14 50	58 19	112 16	194.35
4. Gujarat	1 72	65 00	—	52 81	119.53
5 Haryana	2 00	6.18	—	—	8 18
6. Jammu & Kashmir	0 79	—	—	2.99	3.78
7. Karnataka	11 40	20 29	—	8.52	40.21
8. Kerala	0 49	—	—	—	0 49
9 Madhya Pradesh	3 78	74 46	14 16	—	92 40
10. Maharashtra	3 63	65 45	35 54	—	104 62
11 Manipur	—	—	—	—	—
12 Orissa	—	—	22 99	—	22 99
13. Rajasthan	24 25	73 89	96 35	25 00	219 49
14 Tamil Nadu	—	—	—	—	—
15. Uttar Pradesh	18 00	28 50	44 76	—	91 26
16 West Bengal	0 07	6 25	30 55	—	36 87
Total	83 64	364.37	360 61	201.48	1010.10

Appendix 12—(*Contd*)

(*Rs. in lakhs*)

Name of the State	Loan			Capital	S L. A.	Grand Total
	Constn. of field channels	Purchase of equipment	Total of Cols 7 & 8	Equity Capital support to Land Dev Corpn, etc	Special loan fund for ineligible farmers	
1	7	8	9	10	11	12
1. Andhra Pradesh	20 00	—	20 00	—	—	95.93
2 Assam	—	—	—	—	—	—
3 Bihar	—	—	—	—	—	195 35
4. Gujarat	125 17	—	125 17	—	—	244 70
5. Haryana	20.00	—	20.00	5.00	—	33.18
6. Jammu & Kas ir	—	—	—	—	—	3 78
7. Karnataka	63 00	—	63.00	—	—	103.21
8. Kerala	—	—	—	—	—	0 49
9. Madhya Pra h	20.00	—	20 00	—	—	112 40
10. Maharashtra	61 73	—	61·73	50 00	—	216 35
11 Manipur	—	—	—	—	—	—
12 Orissa	—	—	—	—	—	22 99
13. Rajasthan	—	—	—	60 00	—	279.49
14. Tamil Nadu	—	—	—	—	—	—
15. Uttar Pradesh	75 00	—	75.00	70.00	—	236 26
16. West Bengal	20 00	—	20.00	—	—	56.87
Total	404.90	—	404.90	185 00	—	1600 00

Appendix 13

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING 1976-77

(*Rs in lakhs*)

Name of the State	Grant				Total of Col 2 to Col 5
	Estt of C A D Authority	Survey, Planning, Design & Supervision of execution of OFD Works	Spill-over works taken in IV Five-year Plan (Roads & Markets)	Subsidy to small, marginal and disadvantaged farmers	
1	2	3	4	5	6
1 Andhra Pradesh	18 90	58 88	—	5 00	82 78
2 Assam	1 00	1 00	—	—	2 00
3 Bihar	9 33	37 73	—	240 93	287 99
4 Gujarat	1 50	114 84	—	—	116 34
5 Haryana	1 50	5 00	—	—	6 50
6 Jammu & Kashmir	0 50	1 78	—	1 91	4 19
7 Karnataka	12 44	44 66	—	7 00	64.10
8 Kerala	0 50	1 00	—	—	1 50
9 Madhya Pradesh	10 00	65 67	—	14 20	89 87
10. Maharashtra	9 16	72 95	—	4 06	86 17
12 Manipur	—	—	—	—	—
11 Orissa	2 80	3 10	—	2 00	7 90
13 Rajasthan	55 54	53 00	—	—	108.54
14 Tamil Nadu	0 50	0 50	—	—	1 00
15. Uttar Pradesh	12 50	42 11	—	—	54 61
16 West Bengal	3 02	12 08	—	11 95	27 05
Total	139 19	514.30	—	287 05	940 54

[illegible] (Contd.)

(Rs. in lakhs)

Name of the State	Cost of Field Channels	Loan: Purchase of equipment	Total of Cols. 7 & 8	Capital: Equity Capital support to Land Dev. Corpn. etc.	S.F.D.A.: Special loan fund for ineligible farmers	Grand Total
1	7	8	9	10	11	12
1. Andhra Pradesh	25 00	10.00	65 00	--	26 00	173 78
2. Assam	8 00		8 00		—	10 00
3. Bihar	50 00	-	50 00	-	—	337,99
4. Gujarat	82 33	18 93	101 26	-	—	217,60
5. Haryana	12 50	—	12 50	—	—	19 00
6. Jammu & Kashmir	1 00	—	1 00	—	—	5,19
7. Karnataka	37,50	25 00	62 50	—	—	176 60
8. Kerala	2 50	—	2 50	—	—	4.00
9. Madhya Pradesh	35 00	—	35 00	25 00	4 00	153 87
10. Maharashtra	50 00	—	50 00	—	20 00	156 17
11. Manipur	1 00	—	1 00	—	—	1 00
12. Orissa	5 00	—	5 00	—	—	12 90
13. Rajasthan	50 00	--	50 00	25 00	50.00	233.51
14. Tamil Nadu	0 50	—	0.50	—	—	1 50
15. Uttar Pradesh	143 00	—	143 00	196 00	—	393 61
16. West Bengal	12 50	—	12 50	—	—	39 55
Total	515 83	83 93	599 76	246.00	100 00	1886 30

Appendix 14

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING 1977-78

(*Rs in lakhs*)

Name of the State	Grant				Total of Col 2 to Col. 5
	Estt of C A D Authority	Survey, Planning, Design & Supervision of execution of OFD works	Spill-over works taken in IV Five-year Plan (Roads & Markets)	Subsidy to small, marginal and disadvantaged farmers	
1	2	3	4	5	6
1 Andhra Pradesh	32 36	—	—	44 88	77 24
2. Assam	—	—	—	—	—
3. Bihar	11 45	24 97	—	186 14	222 56
4. Gujarat	3 00	93 07	37 57	—	133.64
5. Haryana	—	—	—	5 58	5.58
6. Jammu & Kashmir	5 40	—	—	4 21	9.61
7. Karnataka	6 50	18 50	—	17 57	42 57
8 Kerala	0 94	—	—	—	0 94
9. Madhya Pradesh	—	65 00	—	—	65 00
10. Maharashtra	8 08	130 47	—	—	138.55
11. Manipur	—	—	—	—	—
12. Orissa	1 00	4 25	—	12 00	17 25
13. Rajasthan	53 98	15 00	—	5 00	73 98
14. Tamil Nadu	—	—	—	—	—
15. Uttar Pradesh	7 62	129 66	—	168.80	306.08
16 West Bengal	1 50	6 50	—	22 00	33 00
Total	131.83	487 42	37 57	466.18	1126 00

Appendix 11 (Contd.)

(Rs. in lakhs)

Name of the State	Constn. of field channels	Loan Purchase of equipment	Total of Cols. 7 & 8	Capital Equity Capital support to Land Dev. Corpn. etc.	S. L. A. Special loan fund for ineligible farmers	Grand Total
1	7	8	9	10	11	12
1. Andhra Pradesh	—	20.00	20.00	95.00	35.00	227.21
2. Assam	—	—	—	—	—	—
3. Bihar	—	—	—	—	—	222.56
4. Gujarat	120.00	—	120.00	—	—	253.64
5. Haryana	—	—	—	—	—	5.58
6. Jammu & Kashmir	—	—	—	—	—	9.61
7. Karnataka	100.00	30.00	130.00	—	10.00	212.57
8. Kerala	—	—	—	—	—	0.91
9. Madhya Pradesh	—	—	—	88.00	10.00	163.00
10. Maharashtra	45.00	—	15.00	—	—	183.65
11. Manipur	—	—	—	—	—	—
12. Orissa	—	—	—	—	—	17.25
13. Rajasthan	25.00	—	25.00	50.00	—	148.93
14. Tamil Nadu	—	—	—	—	—	—
15. Uttar Pradesh	260.00	—	260.00	—	115.00	681.08
16. West Bengal	—	—	—	—	—	33.00
Total	550.00	50.00	600.00	233.00	200.00	2159.09

Appendix 15

STATEMENT SHOWING THE STATE-WISE AND ITEM-WISE FINANCIAL ASSISTANCE RELEASED DURING 1978–79

(Rs in lakhs)

State	Estt. of C.A.D. Authority	Survey, Planning & Design etc.	Subsidy to small and Marginal Farmers	Total grant	Equity Capital Support to LDC's	Loan for Purchase of equipment	Loan for constn of field channel	Total loan	S L A	Grand Total
1 Andhra Pradesh	—	50.00	68.37	118.37	—	35.00	100.00	135.00	--	253.37
2 Assam	3.60	1.89	—	5.49	—	—	—	—	—	5.49
3 Bihar	7.44	68.78	350.00	426.22	105.00	—	50.00	50.00	6.48	587.70
4 Gujarat	6.11	103.50	—	109.61	--	—	50.00	50.00	15.00	174.61
5 Haryana	—	5.37	0.63	6.00	—	—	—	--	—	6.00
6 Jammu & Kashmir	—	--	-	—	—	-	—	--	—	—
7 Karnataka	5.00	14.59	3.00	22.59	-	10.66	88.92	99.58	-	122.17
8 Kerala	1.57	2.01	--	6.90	31.00	—		-	—	40.90
9 Madhya Pradesh	—	36.11		36.11	-	—	-	--	--	36.11
10 Maharashtra	10.71	31.64	1.33	43.50	-	—	11.35	11.35	-	55.15
11 Manipur	-		--	-	--	-	-	—	-	—
12 Orissa	7.11	31.53	6.00	11.64	--		--	--	-	11.64
13 Rajasthan	66.70	91.50		191.20	65.00		250.00	250.00	70.00	576.20
14 Tamil Nadu	-	—		-	--	--	--	—	--	-
15 Uttar Pradesh	17.15	143.55	200.00	360.70	—		523.73	523.73		884.43
16 West Bengal	2.80	15.00	15.55	33.35	-	--		--	-	33.35
Total	101.51	655.41	673.01	1136.35	201.00	45.66	1073.00	1118.66	91.48	2311.47

Appendix 16

POTENTIAL CREATED AND UTILISED IN IRRIGATION PROJECTS FOR COMMAND AREA DEVELOPMENT PROGRAMMES LAUNCHED BY THE GOVERNMENT OF INDIA

(Figures in thousand hectares)

S No	Name of the Selected Irrigation Project	Project Irrigation Potential	1973–74 (Actual)			1977–78 (Actual)		
			Potential created	Utilisation	% Utilisation	Potential created	Utilisation	% Utilisation
1	2	3	4	5	6	7	8	9
	A Irrigation Projects with Command Area Development Authority							
I	*Andhra Pradesh*							
1.	Kurnool-Cuddapah Canal	122 00	122 20	115 00	94 10	122.20	122 20	100 00
2.	Nagarjunasagar							
	a) Left Bank Canal							
	b) Right Bank Canal							
	Sub-total	832 00	414 00	316 00	76 33	519 00	337 00	64 93
3.	Pochampad	267.00	47 00	29 00	61 70	103 00	40 00	38 83
4	Rajoli Bunda Diversion Scheme (medium Project)	35 42	35.42	24.95	70 44	35 42	35 42	100 00
5.	Tungabhadra							
	a) High Level Canal							
	i) Stage I	45 58	45 58	35.40	77 67	45 58	45 58	100 00
	ii) Stage II	50 00	8 00	8 00	100 00	28 00	10 00	35 71
	Sub-to tal	95 58	53 58	43.40	81.00	73 51	55 58	75 53
	b) Low Level Canal	60 00	63 00	40 00	66 67	60 00	60 00	100 00
	Sub-total of Tungabhadra	155 58	113 58	83 40	73.43	133 58	115 58	86 50
	State Total	1412 20	733.20	568 35	77 62	913 20	650 20	69 30

II.	*Bihar*							
6	Eastern Gandak	1151 00	380 00	110 00	28 95	575.00	260 00	45 22
	Kiul-Badua-Chandan Command							
7	Badua	42 50	42 50	38 00	89 41	42 50	40 00	94 12
8	Chandan	62 75	40 80	27 30	66 91	62 75	55 00	87 64
9.	Kiul	25.92	25 92	92.92	100 00	25 92	25 92	100 00
	Sub-total	131 17	109 22	91 22	83.52	131 17	120.92	92 15
10	Kosi (Eastern)	434 00	275 00	152 00	55 27	329.00	166 00	50 46
11	*Sone Canal System*							
	a) Barrage	124 33	124 00	124.00	100 00	124 33	124 33	100 00
	b) High Level Canal	161 40	72 90	56 30	77 23	150 00	110 00	73 33
	Sub-total	285.73	196 90	180 30	91 57	274 33	234 33	85 41
	State Total	2001 90	961 12	533 52	55 51	1309 50	781 25	59.66
III	*Gujarat*							
12	*Mahi-Kadana*							
	Mahi Stage I	186 00				182 81	84 54	46 24
	Mahi Stage II	88 79	132 00	66 70	50 53	60.00	00.45	0 75
	Sub-total	274 79	132 00	66 70	50 53	242 81	84 99	35 15
13	*Shetrunji*							
	a) Khodiyar (Medium)	7 70	7 70	7.45	96 75	7 70	7 45	96 75
	b) Palitana (Major)	34 83	34 83	20 22	58 05	34 83	20 22	58 05
	Sub-total	42.53	12 53	27 67	65 06	42 53	27.67	65.06
14	*Ukai-Kakrapar*							
	a) Ukai	153 00	12 20	00 30	02 45	147.99	20 81	14 08
	b) Kakrapar	227 91	213 00	113 80	53 43	223 40	134 41	59 71
	Sub-total	380 91	225 20	111.10	50 64	371 39	154 25	41.53
	State Total	698 23	399.73	208 47	52 15	656 73	266 91	40.64

Appendix 16 — (*Contd.*)

1	2	3	4	5	6	7	8	9
IV.	*Haryana*							
15.	Gurgaon Canal	81 00	34 00	10 00	29 41	60.00	10 00	16.67
16.	Jawahar Lal Nehru Lift Irrigation Scheme	155.00	4 00	1 00	25 00	30.00	1 00	3.33
17	Jui Lift Irrigation Scheme	19 00	16 00	5.00	31.25	19.00	12.00	63 16
18	Rewari Lift Irrigation Scheme	28 00	20 00	10.00	50.00	20 00	10.00	50.00
	State Total	283 00	74 00		35.13	129.00	33.00	25 58
V.	*Jammu & Kashmir*							
19.	Tawi Lift Irrigation Scheme	12 88	1.50	0 70	46 67	12 88	4.20	32 60
VI	*Karnataka*							
20.	Krishna Rajasagar & Vishweshwarayya Canal	50 59	50 59	50 59	100.00	50 59	50 59	100 00
21.	*Ghataprabha*							
	a) Stage I	86.90	53.30	49 90	93 62	86 90	86 90	100 00
	b) Stage II	52.50	22.20	14.10	63.51	52 50	52 50	100 00
	Sub-total	139.40	75 50	64 00	84.77	139 40	139.40	100 00
22	Malaprabha	206.10	26 00	9.60	36 92	89.20	98.20	76.46
23.	*Tungabhadra*							
	a) Left Bank Canal	234.70	234.70	152 70	65 06	234.70	216.20	92 12
	b) Right Bank Canal	37 40	37 40	30.20	80 75	37.40	35 80	95.72
	c) High Level Canal							
	i) Stage I ii) Stage II	70.20	41 90	32 60	77 80	63.60	50 60	79.56
	Sub- total	342 30	314.00	215.50	68.63	335.70	302.60	90.14

24.	Uppei Krishna	408.10	—	—	—	1.21	1 21	100.00
	State Total	1146.49	466.09	339.69	72.88	616.10	562 00	91.22
VII.	*Kerala*							
25.	Chalakudi	39.37	39.37	39.37	100.00	39.37	39.37	100.00
26.	Malampuzha	42 09	42.09	42.09	100 00	42 09	42 09	100.00
27.	Peechi	28.11	28 11	28 11	100 00	28 11	28 11	100 00
	State Total	109.57	109 57	109 57	100 00	109 57	109.57	100.00
VIII.	*Madhya Pradesh*							
28.	Chambal	273.00	273 00	143 00	59.70	273.00	187.30	68.60
29.	Tawa	332 00	—	—	—	87.00	13 40	15 40
	State Total	605 00	273 00	143 00	59.70	360 00	200.70	55 75
IX.	*Maharashtra*							
	Bagh-Itiadoh Pench							
30.	Bagh	33.70	19 30	6.00	31 09	33 70	18 64	55 96
31.	Itiadoh	40.10	27.70	16 50	59 57	40 10	19.00	47.38
	Sub-total	73 80	47.00	22.50	47 87	73.80	37.64	51.00
	Bhima & Ghod							
32.	Bhima	164.10	5.30	—	—	18.10	4.10	22 65
33.	Ghod	24 60	24 60	10 60	43 09	24.60	20.00	81 30
	Sub-total	188 70	29.90	10 60	35 20	42 70	24.10	56.91
	Galhati-Purna-Jayakwadi							
34.	Jayakwadi	141.60	24.10	—	—	84.00	28 00	33.33
35.	Purna	61.50	61 50	20.60	33.50	61 50	55 00	89 42
	Sub-total	203.10	85.60	20 60	24 07	145 50	83 00	57.04

Appendix 16 — (*Contd.*)

1	2	3	4	5	6	7	8	9
	Girna-Upper Tapi Stage I							
36	Girna	57.20	57.20	26 20	45 80	57 20	45.00	78 67
37	Upper-Tapi Stage 1	55.20	—	—	—	7 70	1.00	12.97
	Sub-total	112.40	57 20	26 20	45.80	64.90	46 00	70 09
38.	Krishna	110.90	—	—	—	19.00	3 40	17.89
	State Total	688 90	219 70	79 90	36 60	345 90	191.14	56.30
X.	*Orissa*							
39.	Hirakud	251 20	250.64	250 57	99 97	251 20	251 20	100 00
40.	Mahanadi Delta	562 50	327 70	327.70	100 00	465 10	465.10	100 00
41.	Salandi	53 40	52 70	46 70	88.64	53.40	53 40	100.00
	State Total	867.10	631 04	624 97	99 04	769.72	769.72	100 00
XI	*Rajasthan*							
	Bhakra-Gang Canal							
42.	a) Bhakra	238 00	238 00	238.00	100.00	238.00	238 00	100 00
	b) Gang	303.52	303 52	303.52	100 00	303.52	303.52	100 00
	Sub-total	541.52	541 52	541 52	100 00	541.52	541.52	100 00
43.	Chambal	219.00	174 00	157.00	90.23	175.00	170 46	98.50
44.	Rajasthan Canal Project Stage II	590.00	290.00	222 00	76 55	489.00	293.00	59 92
	State Total	1350.52	1005 52	920 52	91.55	1205.52	1006.98	83.53
XII.	*Uttar Pradesh*							
45.	Gandak (Western)	385.97	216.51	102.17	47.19	288.37	185 00	64.15
46.	Ramganga	591.11	167.97	121 41	71 43	543 48	410 00	75 44
47.	Sharda Sahayak	1728.00	—	—	—	680 00	400 00	58 82
	State Total	2705.08	386 48	223 58	57 85	1511 85	995 00	65 81

XIII.	*West Bengal*							
48.	D. V. C.	515.00	331 00	291 00	87.91	344 50	341.00	98 98
49.	Kangsbati	401.46	206 00	191 00	92 71	280 00	252 00	90 00
50.	Mayurakshi	246.86	237 00	237 00	100 00	245.50	244 30	99 51
	State Total	1163.32	774 00	719 00	92.89	870 00	837 30	96 24
	Total (A)	*13044 19*	*6033 95*	*4497 27*	*74.53*	*8809 97*	*6410 97*	*72 77*
	B Irrigation Projects without Command Area Development Authority							
I.	*Assam*							
1	Jamuna	33 00	33.00	12 00	27.50	33 00	19 00	57 57
II.	*Madhya Pradesh* *Barna-Halali*							
2	Barna	60 70	—	—	—	38 00	7 30	19 21
3	Halali	37 20	—	—	—	—	—	—
	Sub-total	97 90	—	—	—	38 00	7 30	19 21
	Hasdeo-Kharung-Maniyari Tanks							
4	Hasdeo	42 00	—	—	—	40.00	38 00	95 00
5.	Kharung Tank	40 47	40 47	40 47	100 00	40 47	40 47	100.00
6.	Maniyari Tank	30 76	30 76	30 76	100 00	30 76	30.76	100 00
	Sub-total	113 23	71 23	71 23	100 00	111 23	109 23	98.20
	State Total	211 13	71 23	71 23	100 00	149 23	116 53	78 09
III.	*Manipur*							
7.	Loktak Lift Irri. Scheme	40 00	—	—	—	—	—	—

Appendix 16 — (*Contd.*)

1	2	3	4	5	6	7	8	9
IV	*Tamil Nadu*							
8.	Cauvery System	428 98	428 98	428 98	100 00	428 98	428 18	100 00
9	Lower Bhawani	78 92	78 92	78 92	100 00	78 92	78 92	100 00
10	Periyai Vaigai	62 32	62 32	62 32	100 00	62 32	62 32	100 00
	State Total	570 22	570 22	570.22	100 00	570 22	570 22	100 00
	Total (B)	*854.35*	*674 45*	*653 45*	*96 88*	*752 45*	*705 75*	*93 79*
	All-India Total (A + B)	**13898.54**	**6708 40**	**5150.72**	**76.78**	**9562 42**	**7116.72**	**74.42**
		C. All-India Picture at a Glance						
		(a) Irrigation Projects with CAD Authority						
1.	Andhra Pradesh	1412 20	732 20	568 35	77 62	913 20	650 20	69 30
2.	Bihar	2001 90	961 12	533 52	55 51	1309 50	781 25	59 66
3	Gujarat	698 23	399 73	208 47	52 15	656 73	266 91	40.64
4	Haryana	283 00	74 00	26 00	35 13	129.00	33 00	25 58
5	Jammu and Kashmir	12.88	1 50	0 70	46 67	12 88	4 20	32 60
6	Karnataka	1146 49	466 09	339 69	72 88	616.10	562 00	91 22
7	Kerala	109.57	109 57	109 57	100 00	109.57	109 57	100 00
8	Madhya Pradesh	605 00	273 00	143 00	59 70	360 00	200 70	55 75
9	Maharashtra	688 90	219 70	79 90	36 60	345 90	194 14	56 30
10	Orissa	867 10	631 04	624 97	99 04	769.72	769 72	100.00
11	Rajasthan	1350.52	1005 52	920 52	91 55	1205.52	1006.98	83 53
12	Uttar Pradesh	2705.08	386 48	233 58	57 85	1511 85	995 00	65 81
13	West Bengal	1163 32	774.00	719 00	92.89	870 00	837.30	96.24
	Total for A	*13044 19*	*6033 95*	*4497 27*	*74 53*	*8809 97*	*6410 97*	*72 77*

	B. Irrigation Projects without CAD Authority							
1	Assam	33 00	33 00	12 00	27 50	33 00	19 00	57 57
2	Madhya Pradesh	211 13	71 23	71 23	100 00	149 23	116 53	78 09
3	Manipur	40.00	—	—	—	—	—	—
4	Tamil Nadu	570 22	570 22	570 22	100 00	570 22	570 22	100 00
	Total for B	*854 35*	*674 45*	*653 45*	*96.88*	*752 45*	*705 75*	*93 79*
	All-India Total (A + B)	**13898 54**	**6708 40**	**5150 72**	**76 78**	**9562 42**	**7116 72**	**74 42**

EMPLOYMENT GENERATION IN RURAL INDIA

J S Mathur

Introduction

One of the major problem of developing societies has been the unemployment and underemployment The magnitude of the problem in our country could be judged from the data in Table 1.

Table 1 : Unemployment Backlogs, New Entrants and Employment Created during Plan Period

(*in millions*)

	Plans					
	I	II	III	Annual Plans	IV	1966–76
Backlog	3 3	5 3	7.1	9 6	12 6	9 6
New Entrants	9 0	11.8	17 0	14 0	23 0	53 0
Market Supply	12 3	17 1	24 1	23 6	45 6	62 6
Additional Employment						
Non-Agriculture	5 5	6.5	10 5	9 0	14 0	16 0
Agriculture	1 5	3 5	4 0	2 0	4 5	9 0
	7 0	10 0	14 5	11 0	18 5	25 0
Backlog	5 3	7.1	9 6	12 6	27 1	37 6

Source Reserve Bank of India Bulletin, 1977.

Quite distinct from the problem of unemployment in developed societies where it is mainly the outcome of cyclical and technological factors, in developing societies the very phenomenon of under-development consists of a high percentage of population depending on primary occupations with a very low resource base, low incomes and savings potential, traditional skills and attitudinal patterns.

Some of the important conclusions from analysis of phenomenon of unemployment and poverty in the country are important for national employment generation programme. These are . (1) Widespread under-employment and disguised unemployment with wide regional variations in the levels of development in the country; (2) Highly skewed distribution pattern of resource-base in the form of landholdings, productive assets and levels of technology adopted; (3) Wide differences in the pattern of incomes, saving potential, investment capabilities. risk-taking and entrepreneurial potentials; (4) Wide differences in educational levels and access to knowledge about improved agricultural and industrial development potentials, and (5) Socio-

cultural factors including caste system, dependency on traditional employment sources as in the case of agricultural labour, low levels of aspiration and motivation as a part of social structural constraints

An attempt would be made in the following pages to give an outline of the various attempts at employment generation, new national policy for employment generation and its implementation, and a critique and suggest guidelines for future policy

Review of Employment Programmes in Rural Areas

1 *Rural Works Programme* The Rural Works Programme was initiated as early as in 1961 for which an initial provision of Rs. 150 crores was made The basic objective was to utilise the manpower resources and to ensure a substantial expansion in employment opportunities The net increase in employment, however, as assessed by the Planning Commission, was that this programme did not make sufficient impact on employment generation mainly because of substantial curtailment of allotment from Rs. 150 crores to Rs 19 crores There was shortage of technical and expert staff to support the programme There was considerable delay in the release of funds and technical sanctions were not forthcoming in time. There was also lack of proper coordination and active collaboration among concerned technical departments

2 *Crash Scheme for Rural Employment* The Crash Scheme for Rural Employment was initiated in 1971-72 to remove poverty through generation of employment in rural areas. It was continued for three years. It is reported that it generated employment to the tune of 3,150 lakh man-days in the three years put together It also resulted in some tangible achievements mainly in the form of minor irrigation works, land development including reclamation, soil and water conservation, groundwater recharging, drainage and water-logging and flood protection It also contributed to development of pisciculture and extension of roads and culverts Table 2 and 3 indicate the fund

Table 2 : The Year-wise Allocation of Funds, Amounts Actually Released, Expediture Incurred, and Employment Generated under the Crash Scheme for Rural Employment

Year	Allocation of funds (Rs in lakhs)	Amount Released (Rs in lakhs)	Expenditure incurred (Rs in lakhs)	Employment Generated (lakh man-days)
1971-72	5,000 00	3,373.430	3,116 580	789.660
1972-73	5,040 745	4,711.395	5,334 480	1,344 070
1973-74	4,233 550	4,178 000	4,265 880	1,023 660
Total	14,274 205	12,262 825	12,716 940	3,157 390

Source : Annual Reports of Ministry of Agriculture and Irrigation

allocations, amounts released and expenditure incurred, employment generated and the physical achievements under the Scheme.

Table 3 : Physical Achievements under the Crash Scheme for Rural Employment

S No.	Categories of Works	Physical Achievements
1	Minor Irrigation	1,85,132 (Ha)
2	Land Reclamation	10,549 (Ha)
3	Soil Conservation	33,496 (Ha)
4	Water Conservation and Groundwater Recharging	1,516 (Ha)
5	Afforestation	32,559 5 (Ha)
6	Flood Protection	1,35,028 0 (Ha)
7	Drainage and Anti Water-logging	1,89,172 0 (Ha)
8.	Community Orchards	599 (Ha)
9	Panchayat Land Development	847 (Ha)
10	Pisciculture tanks	3,147 (Nos)
11	Roads	86,197 (Kms)
12	Culverts	6,769 (Nos)

Source Annual Reports of Ministry of Agriculture and Irrigation

Some of the main difficulties in the implementation of the Crash Scheme for Rural Employment were the same as in the case of Rural Works Programme. Moreover, these schemes were taken up on an *ad hoc* basis and were not an integral part of the rural development planning as such

3 *Pilot Intensive Rural Employment Projects (PIREP).* These projects were launched as action-cum-research studies in 1972 for a period of three years in 15 selected blocks in the country, one block being selected from each of the major states. These blocks were selected on the basis of a variety of agro-climatic conditions to make more reliable estimates of the extent of unemployment, under-employment and seasonal variations in different parts of the country as well as to initiate employment projects so as to arrive at a condition of full employment over a period. one-third, two-third and full employment by the last year of the action-cum-research project. The employment was to be generated through works which directly related to agricultural operations. It was also expected that these employment schemes would form part of the area development plans for these blocks The state governments were made responsible for the actual implementation of the projects with the District Collectors being in overall charge of implementation and the BDOs working as project officers. Two major types of activities that were taken up under this project were roads and minor irrigation works. It was expected that minor irrigation works would form one-eigth of the allocations

When we, however, look at the actual achievements of the PIREP, we find that the results have not been commensurate with the expenditure incurred and efforts made Some of the major problems in the actual implementation have been the same as for the earlier schemes like Rural Works Programme and the Crash Scheme for Rural Employment Tables 4 and 5 give the actual performance including the financial allocations, amounts spent, employment generated and physical achievements under these projects

Table 4 . Pilot Intensive Rural Employment Projects – Allocations, Amounts Released, Expenditure Incurred and Employment Generated

Year	Allocations Made (Rs. in lakhs)	Amounts Released (Rs in lakhs)	Expenditure Incurred (Rs in lakhs)	Employment Generated (lakh man-days)
1972–73	150 00	150 00	118 31	33.70
1973–74	248 85	248 85	218 30	50 14
1974–75	594 14	594 14	621.63	97.76
Total	992 99	992 99	958 24	181 60

Source Annual Reports of the Ministry of Agriculture & Irrigation

Table 5 · Physical Achievements under PIREP 1972–75

S. No	Category	Physical Achievements
1	Minor Irrigation (Ha)	352
2	Soil Conservation and afforestation (Ha)	—
3	Land Reclamation and Flood Protection (Ha)	1,148
4	Pisciculture tanks (Ha)	26
5	Fodder Development (Ha)	7
6	Soil Conservation (Ha)	20
7	Roads constructed/repairs (Kms)	931
8	Drinking Water Wells (Nos)	8
9	School rooms (Nos)	54
10	Rural Godowns (Nos)	4
11	Houses for Weaker Sections (Nos)	20
12	Culverts (Nos)	118

Source Reports of Ministry of Agriculture and Irrigation

4 *Employment Guarantee Scheme of Maharashtra.* Provision of employment in Maharashtra has been receiving attention of the government from 1964–65 onwards This got reflected in the Integrated Area Development Scheme initiated in selected blocks with focus on employment in that year. The actual Employment Guarantee Scheme was launched in 1970–71.

The severe drought conditions in 1972–73 changed the entire focus and the priority was given to relief works in all the drought-affected areas. It can, therefore, be stated that Employment Guarantee Scheme of Maharashtra has effectively been implemented only from 1973–74 onwards Table 6 gives allocations in crores of rupees, expenditure incurred, and million man-days employment generated

Table 6. Employment Guarantee Scheme of Maharashtra

Year	Allocations (Rs in crores)	Expenditure (Rs. in crores)	Man-days (million)
1972–73	24 00	18 8	4 5
1973–74	44 00	18 8	5 1
1974–75	150.00	137 2	48 1
1975–76	500 00	344 3	109.5
1976–77	500 00	233 0	75 9

It would be evident that the Government of Maharashtra have given high priority not only to resource allocations but also to implementation of the scheme through the district administration, making the Collector incharge of the scheme The Collector has to ensure that the normal labour force requirements of farming and other agricultural operations are given priority before initiating works under the Employment Guarantee Scheme. Agricultural minimum wages have also to be ensured to all the beneficiaries.

The Maharashtra state government's interest in the scheme is also evidenced by the fact that it has passed the Employment Guarantee Scheme Act in 1977. Some of the important policies as reflected in the Act as well as in government orders are as follows :

1 In guaranteeing employment, the beneficiary cannot choose about the type of work as well as place of work. The scheme is so operated that the beneficiary is provided with employment within the same Panchayat Samiti or the adjoining Panchayat Samiti. The Government would, however, be within the limits of law if employment is provided in any part of the district of residence.

2. The scheme would normally seek to ensure that the work is provided within 5 Kms. of residence. In case employment is provided beyond 5 Kms., Government ensures that accommodation in the form of huts, sanitary conditions, drinking water supply, medical facilities and fair price shop are provided to enable him to meet his daily requirements

3. The work has to be provided within 15 days of demand being made by the beneficiary, first demand being entertained only from groups of 50 prospective employment seekers presenting themselves before the

BOD for work which has to be extended for a period of at least 15 to 30 days at a stretch.

4. The entire Scheme is implemented through departmental working and not through contractors Out of the total expenditure, at least 60 per cent has to be incurred on wages, usually rate being a minimum of Rs 3/- per day for seven hours of work

5. In the selection of works, priority is given to completion of the relief works, production works of labour intensive nature such as minor irrigation, soil conservation, land development and flood control and Command Area Development works The lowest priority is given to road projects.

6 The Scheme has also made a very systematic effort to mobilise resources through special taxation measures Table 7 gives the package of taxes and other collections for the Scheme in 1976.

Table 7 : Special Taxation under Employment Guarantee Scheme of Maharashtra
(Rs in crores)

1	Tax on professions, trades, callings and employment	10 42
2	Surcharge on Sales Tax	7 42
3.	E G Cess on Urban Property	1 30
4.	E G Surcharge on Motor Vehicle Tax	0 75
5	Surcharge on Land Revenue on Holdings above 3 2 hectares	2 34
6	E G Cess on Irrigated Land@ Rs 25/- per hectare	3 00
	Total	25 00

It will be clear from Table 7 that the Government of Maharashtra have tried to mobilise resources not only from rural areas as indicated by the surcharge on land revenue on large landholdings and cess on irrigated land but also from urban areas in the form of taxes on professions, trades and employment, surcharge on sales tax, cess on urban property and surcharge on motor vehicle tax Government have, therefore, treated the Employment Guarantee Scheme as a policy instrument for redistribution of incomes from richer to poorer sections of society

The new approach of the Maharashtra government is to integrate the Employment Guarantee Scheme with the on-going rural development programmes such as SFDA and DPAP with its watershed planning It is now expected that the Scheme would now be dovetailed with Integrated Rural Development Programme with its major thrust on employment generation and thus also avoiding any fear that all the artisans in a village may even be turned into earth-workers.

5. *Food for Work Programme.* The phenomenon of surplus buffer stock of food co-existing with widespread unemployment and hunger has been

an important area of concern to the government. Accordingly, the Government of India have started the Food for Work Programme in 1977-78 for achieving the twin objectives of employment generation and development of a sound economic and social infrastructure in rural areas Originally, it was started as a non-plan scheme to augment the funds of the State Governments for the maintenance of pulic works on which large investments had already been made in the earlier plan period.

The policy has subsequently been modified so as to include all items of work, plan and non-plan, provided these result in durable community assets During the year 1977-78, 204 lakh tonnes of wheat was allocated to different state governments and during the year 1978-79, a target of utilisation of 1,000 lakh tonnes of wheat has been fixed The basic objectives of the programme are (1) to generate additional gainful employment to large number of unemployed and under-employed persons, both men and women, in rural areas so as to improve their incomes and consequent raising of their nutritional levels, (2) to create durable community assets and strengthen rural infrastructure which will result in higher production and better living standards in rural areas, and (3) to utilise surplus foodgrains for devevlopment of human resources

The works which are being taken up under the programme include the following (a) major, medium and minor irrigation works; (b) Food, protection, drainage and anti-water logging works; (c) soil and water conservation and reclamation, (d) afforestation and social forestry works on Government and community lands, including lands belonging to local bodies like panchayats, etc., roads-side plantations, plantations along canal banks and on waste lands, on sides of railway lines, etc ; (e) construction of intermediate and main drains field channels, land levelling, etc., in the command areas of irrigation projects, cleaning and desilting of water courses, etc., (f) roads including State Highways, widening and strengthening of forest roads and canal service roads for throwing them for public use; (g) school buildings, panchayat ghars, community centres, drinking water wells belonging to government and local bodies including panchayats or the community in rural areas provided provision for expenditure on such schemes is reflected in the State budget; and (h) any other work not covered under the above items but which will result in creation of durable assets for the benefit of the rural poor, *e g* , providing a village pond or repairs for deepening and rejuvenation of an existing tank for providing water for human use or for cattle, for developing irrigation or fisheries etc., thereby augmenting the income of the village panchayat which can be used for providing better sanitation or street lighting, etc in the villages, location specific works such as cleaning of irrigation reservoirs and channels and fishery tanks of water hyacinth and turning it into organic manures, etc

The basic principle is that the foodgrains supplied by the government of India would be additional to resources already allocated to state Governments during the plan period At the same time, the state governments have to match by cash component including expenditure on transport and storage of foodgrains, supply of equipment and other materials as well as supervisory and technical services to ensure effective implemention of the programme. Tables 8 and 9 give the progress of implementation of Food for Work Programme during 1978–79 and revised up to May, 1979. These include foodgrains allocated, released and utilised in different states as well as employment generated in lakh mandays during the year 1977–78 and 1978–79

Employment Planning Programmes

1 *Integrated Rural Development Programme.* The Government of India have decided to take up employment generation as one of the major programmes under the Integrated Rural Development Programme It has been decided that 2, 000 blocks would be taken up for intensive efforts out of 3. 000 blocks covered under the three special programmes *i. e*, SFDA, DPAP and CADP. They have decided to allot a sum of Rs. 5 lakhs to each Block as additional funds during the year 1978–79. The allocation can be increased if performance is good and the state government makes the request sufficiently in advance. The funding of the on-going three special programmes would, however, be continued at the 1977–78 level in the 1,000 Blocks. Besides, 300 Blocks would be selected each year from non-special programme areas.

The main objective of the new IRD programme is full employment and growth with distributive justice. The additional employment generation is now being planned so as to benefit the target groups consisting of small and marginal farmers, share-croppers, agricultural labourers, rural artisans and members of scheduled castes and scheduled tribes The main efforts under the programme would be to prepare area specific plans for full employment within a period of ten years and elicit people's active participation, utilise voluntary agencies, organize training of target groups and field staff at various levels and give a research base to the programme through evaluative studies including base-line surveys of households.

The following major sectors are sought to be integrated under the new approach: (1) Agricultural development including animal husbandry, fisheries, forestry and horticulture, (2) Village, Cottage and Small Industries; (3) Tertiary sector employment for various services, and (4) Labour mobilisation training in skills, and promotion of mobility to tie up labour with opportunity.

The state governments have taken up preparation and implementation of block-level plans under the new IRD programme and during the year 1978–79, more than 1,000 Block Plans have been prepared and nearly 800 are already under implementation. It is expected that this new approach

Table 8 : Progress of Implementation of Food for Work Programme

(Quantities of foodgrains allocated, released, utilised during 1978–79 under the Food for Work Programme Revised by incorporating the information received up to 31-5-1979)

S No	State	Foodgrains allocated (MT) 1978–79	Foodgrains released (MT) 1978–79		Foodgrains utilised (MT)		Period to which it relates
			Wheat	Rice	Wheat	Rice	
1	2	3	4	5	6	7	8
1	Andhra Pradesh	146000	61000	65000	23987 00	249 00	Dec , 1978
2	Assam	15000	5000	5000	7000 00	—	Feb , 1979
3	Bihar	200000	200000	—	182140 00	—	March, 1979
4	Gujarat	50000	15000	—	15968 00	—	March, 1979
5	Haryana	20000	20000	—	15903 00	—	March, 1979
6	Jammu & Kashmir	10000	3000	3000	3000 00	3000 00	March, 1979
7	Karnataka	50000	7000	8000	1037 23	—	Dec , 1978
8	Kerala	50000	13000	13000	6955 18	1219 00	Feb , 1979
9	Himachal Pradesh	3000	1500	—	1434 04	—	March, 1979
10	Madhya Pradesh	125000	101000	24000	74681 22	3000 00	Feb , 1979
11	Maharashtra	71000	35000	5000	52240 00	—	March, 1979
12	Nagaland	3000	750	750	750 00	—	March, 1979
13	Orissa	200000	152500	47500	146145 76	34599 91	March, 1979
14	Punjab	63000	32000	—	36713.60	—	Jan , 1979
15	Rajasthan	261000	261000	—	250379 00	—	March, 1979
16	Tripura	10000	6000	2000	6686 00	1528 00	Feb , 1979
17	Uttar Pradesh	136000	125500	10500	126333.00	—	March, 1979
18	West Bengal	205000	150000	—	130000 00	—	March, 1979
19,	Mizoram	1200	1200	—	672 00	—	Jan , 1979
	Grand Total	1619200	1190450	183750	1082025 03	43595 91	

Table 9 : Statement Showing the Employment Generated under Food for Work Programme During 1977-78 and 1978-79

S No	State	Employment generated 1977-78 (in lakh mandays)	Employment generated 1978-79 (in lakh mandays)	Period to which it relates
1.	Andhra Pradesh	—	49 392	Sept , 1978
2.	Assam	NR	NR	NR
3.	Bihar	14 76	77.720	Sept , 1978
4	Gujarat	—	37 760	Sept , 1978
5.	Haryana	—	24 76	March, 1979
6.	Himachal Pradesh	0 70	1 205	Sept , 1978
7.	Karnataka	5 02	44 71	March, 1979
8	Kerala	21 43	24 993	March, 1979
9	Madhya Pradesh	44 00	12 40	March, 1979
10	Maharashtra	NR	28 100	Dec , 1978
11	Orissa	68 69	175 640	Dec , 1978
12	Punjab	0 14	49 93	March, 1979
13	Tripura	NR	NR	
14	Uttar Pradesh	58 19	223 32	March, 1979
15	Rajasthan	6 87	481.16	March, 1979
16	West Bengal	218 43	67 650	Sept , 1978
17	Mizoram	—	0 011	Sept , 1978
18	Jammu & Kashmir	—	5 83	March, 1979
		438 23	1304 581	

to employment generation through the Integrated Rural Development Programme would make a very significant dent on the complex problem of unemployment and under-employment.

2. *Employment Generation under Rural Industrialization.* As far as employment generation under the rural industrialization is concerned, the Government of India had set up two important Working Groups, one for the overall set up of Village and Small-scale Industries in the Sixth Plan, and the other for industries covered under the Khadi and Village Industries Commission. The report of the first group has made extensive review of the earlier Rural Industries projects, Rural Artisans programmes and made several important recommendations The Rural Industries projects were initiated as early as 1962 and had yielded 1,33,000 industrial units by March, 1976 and 14,400 artisans trained under the Rural Artisans programmes, of whom 6,300 are reported to have set up their own units.

In its approach to rural industrialisation, this Group has estimated that out of total employment to be generated during the Sixth Plan, agriculture and allied sectors may be expected to absorb about 20 million while construction, mining, large-scale industry, etc. should provide for another 9 million leaving a balance of 17 million to be tackled by the Small-scale Industry sector including village industries. Of this, it has been estimated that Khadi and Village Industries would take care of 4 million, Silk Industry of 4.5 million, Handloom Weaving of 3.5 million, Handicrafts of 1.5 million and Coir of 0 5 million. All these together with agriculture and allied sectors would provide employment opportunities to 14 million persons It has been visualised that the balance of 3 million would be the target of employment generation in the modern Small Scale Industry sector during the Sixth Plan period

The group has also outlined the policy of integration of activities of large, medium, small and village industries sectors as an important element of the strategy for the development of village and small industries It has also stressed on the need to modify the approach to programmes for weaker sections of the community, specially Scheduled Castes and Scheduled Tribes. It has rightly stressed on the need for providing a national policy support for marketing to village and small industries In addition to continuing the existing schemes of government procurement and price preference, new measures are called for including training in entrepreneurship-cum-managerial aspects, institutional finance, promotion of industrial cooperatives, production planning, investment-cum-employment subsidy, loan under DIR scheme, machinery on hire purchase, built-up sheds in industrial estates, power subsidy, income tax holiday for five years, exemption from fiscal measures and reservations of specific items. The Group has also made recommendations regarding the new administrative support in the form of RIP now to be reorganized as District Industries Centres, Small Industries Service Institutes, marketing and training support, supply of raw-materials, Research and Development for evolving appropriate technology and increasingly keeping the weaker sections as groups for special attention. The Group has also given the financial requirements to make this programme effective.

Apart from these, Working Group on the Khadi and Village Industries Commission have also made considerable effort to outline the objectives, given proposals for production and employment planning for specific industries including the cottage and village industries and outlined the overall perspective.

The Khadi and Village Industries Commission is responsible for development of 24 village industries including Khadi Programmes are implemented through (*a*) State Khadi and Village Industries Boards set up under the respective State Acts, (b) Institutions registered under the Societies Regis-

tration Act, 1860, (c) Cooperatives registered under State Cooperative Acts, and (d) Individual artisans By the end of 1977–78, there were 20 Statutory Boards, 700 registered institutions and over 27,000 cooperatives. Top priority is being given to generation of large employment opportunities

The performance of the Khadi and Village Industries Commission in terms of outlays, production and employment over the years can be judged from the figures in Table 10

Table 10

Year	Outlay (in Rs crores)	Production (in Rs crores)	Employment (in lakh Nos)
1973–74	15 97	155 12	18 12
1977–78	44 65	250 82	23 14
1978–79 (target)	66 00	314 15	28 50
1979–80 (target)	110 00	406 00	33 64

While production increased by 62 per cent, employment increased by 28 per cent in 1977–78. Major production was in Khadi which showed an n crease of 96 per cent

Financial Outlays. Financial outlays have also shown substantial increases over the years which may be seen from the data in Table 11

Table 11

(*Rs in crores*)

	1976-77	1977–78	1978–79	1979-80 (Proposed)
Khadi	15 60	25 30	38 00	65 00
Village industries	6.13	9 88	17 00	35 00
Interest subsidy	7.26	9 47	10 00	10 00
	28 45	44 65	65 00	110 00

Institutional Finance Khadi and Village Industries Commission obtained a cash credit limit of Rs. 10.05 crores from three nationalised banks, *viz*, State Bank of India, Allahabad Bank and Punjab National Bank, for purchase of cotton and wool. The Commission is presently negotiating for raising the cash credit limit to Rs. 15 crores. Further the implementing agencies under the Khadi and Village Industries Commission obtained additional working capital requirements to the tune of Rs 6.5 crores by the 31st March 1978.

Sales Rebate in Khadi. A special rebate of 20 per cent for a period of 90 working days was given during the year 1977–78. This was done with a

view to help clear the accumulated stocks During the period of 90 days aggregated to Rs 38.89 crores.

Research and Development. Research and Development efforts were towards evolution of appropriate technology to increase production and earnings. Khadi and Village Industries Commission has 22 research and development schemes in hand which are being specially financed by the National Committee on Science and Technology An amount of Rs. 40 lakhs was spent on R & D activities during the year 1977–78. Some important R & D achievements have been in palm gur, palm products, eri and tussar silk, tussar waste, muslin khadi, utilisation of non-edible oils, and charkha technology.

Training There are six Central Training Institutes, and two Regional Training Centres to impart necessary skills and aptitudes to middle-level supervisory staff engaged in production and sale of khadi and village industries products There are also Khadi Gramodyog Vidyalayas in most states which are being run by voluntary institutions In-plant training is organised in production centres for new spinners and weavers Technical Directorates of the Khadi and Village Industries Commission have regional training centres for imparting necessary skills and orientation to middle-level and lower categories of technical personnel. At some places the training and research are combined into training-cum-research centres. Management-oriented training has been organised from time to time in collaboration with institutions, like SIET Institute, Hyderabad; Indian Institute of Management, Ahmedabad, etc. Cooperative training is also arranged through Cooperative Training Colleges managed by the National Cooperative Union of India During the year 1977–78, 1690 persons were trained in various courses conducted by Khadi and Village Industries Commission and its agencies

Marketing. The Commission has a network of about 3,500 Khadi Gramodyog Bhandars, 12 Emporia and about 10,000 sale outlets through the country. The Commission has also decided to use these outlets for distribution of essential commodities and other consumer goods. Steps are being taken to streamline and strengthen the marketing set up.

Special Schemes. With a view to maximising employment, the Khadi and Village Industries Commission formulated new programmes for rapid expansion of (*i*) cottage match industry, (*ii*) non-edible oils and soap industry, and (*iii*) village leather industry. It is aimed to increase production in village soap industry by 150 per cent, employment by 100 per cent and earnings by 100 per cent by the end of 1982–83. Similarly, in the cottage match industry it is aimed at more than double production, employment and earnings by 1982–83.

In the light of the approach enunciated, the Working Group have proposed the following objectives for the Sixth Five-year Plan (1978–79 to 1983–84)

1 The principal and primary objective for rural industrial sector would be to cover all the existing artisans by the development programmes of khadi, village and rural industries and to ensure continued and fuller employment to them in the present occupations

2 To widen the employment base by expanding and diversifying the existing schemes and by undertaking additional schemes, particularly in areas where the need to create employment opportunities is acute and urgent

3. To aim at the level of earnings/wages for rural artisans adequate enough to meet the basic necessities of life such as food, clothing, shelter, education and medical care so that they can come out of the level of destitution, if not poverty, within a set time

4. To strengthen infrastructural facilities such as procurement of raw materials, storage, manufacture and supply of improved tools and equipment market development, training, etc.

5 To undertake research and development, including product development, identification of new raw materials, diversification of processes, designing, improvements in packaging, etc.

6 To process at the village level, locally available raw materials and easily available raw materials from outside for intermediate/semi-finished products of other industries

7. To undertake industrial activities connected with agriculture, poultry, horticulture, animal husbandry, dairying, housing, etc, which strengthen agriculture and integrated development of the rural sectors

8 To create socio-economic conditions in the life of the people for the sustained growth and development of these activities in the changing conditions with a view to bring these activities on to the mainstream of economic life of the country.

The Working Group on Khadi and Village Industries have proposed an elaborate plan for employment generation

From the present level of employment of 10 23 lakhs in 1976-77 in Khadi, it is proposed to increase employment to 19.89 lakhs, *i e*, by 95 per cent in 1983–84 This includes the increase in the field of cotton khadi from 8 08 lakhs in 1976–77 to 13.43 lakhs in 1983–84, woollen khadi from 1.80 lakhs to 5 10 lakhs in 1983–84 and silk khadi from 0 35 lakhs to 1.36 lakhs in 1983–84

In village industries, employment would increase from the present level of 11 81 lakhs (1976-77) to 57 69 lakhs in 1983-84, *i. e*, by 394 per cent. The important industries which would contribute for increased share of employment would be PCPI—12 19 lakhs, NEO & Soap—11.20 lakhs, Palm gur—10 00 lakhs, Village Pottery—4.25 lakhs and Fibre—3 99 lakhs. Some of the artisans are still carrying on their activities without any assistance either from the KVIC or any other agency. This plan would *inter alia* cover them by development activities to enable them to have continued and fuller employment by providing the required inputs, Out of the total employment of about 8 million, 2 millions have already been covered. Out of additional 6 million, 2 million would be the existing traditional artisans and yet covered, whereas the remaining 4 million would be freshly employed. The details are given below.

Production In Khadi, the production would increase from Rs. 55.00 crores in 1976-77 to Rs 189 54 crores in 1983-84, *i. e*, by 245 per cent. It would be shared by cotton khadi with Rs 87.74 crores, woollen khadi Rs 36 00 crores and silk khadi Rs 65.80 crores.

In village industries, there would be a manifold increase from the present level of production of Rs 181 01 crores in 1976-77 to Rs 6,206.78 crores in 1983-84 or by 3,329 per cent, P. C P industry would account for the largest production of Rs 4,808 40 crores in 1983-84 mainly on account of our thrust on processing in the village sector

Outlay The net additional outlay for six years for khadi would be of Rs 550 21 crores (Rs 169 72 crores grant, Rs. 380 49 crores loan) In village industries, it would be Rs. 998 33 crores (163 05 crores grants, Rs 835.28 crores loan). Assistance would be provided for both capital expenditure and working capital In addition, an amount of Rs 27.54 crores has been proposed for meeting the cost of other schemes such as training, marketing and departmental programme in hill and border areas. An outlay of Rs. 107 31 crores has been proposed for research and development. The amount of interest subsidy both for Government loans and for loans raised from the banks would be of the order of Rs 254.37 crores

All in all, the total outlay for six years would be of the order of Rs. 1,937 76 crores (Rs 712.79 crores grant, Rs. 1,224.97 crores loan) which would provide employment to 77.58 lakh persons and their production would be of the order of Rs. 6,396 32 crores in the terminal years of the Six-year Plan, industry-wise details are as under.

Cotton Khadi It is proposed to set up 10,174 sheds, 1,230 muslin units and introduce additional 261 sets of two spindle new model charkhas, 8,665 sets of six spindle new model charkhas and 82,920 handlooms during the Six-year Plan A work force of 1,500 persons each year will be trained to be in-charge of the N M C Units. The new weavers to be brought into

khadi fold will be rehabilitated in spinning areas. Eight hundred new institutions will be created at a work volume rate of Rs 5 lakhs each The outlay required (including sales rebate) will be Rs 286 21 crores The production will be increased from 55 00 million square metres valued at Rs 36 00 crores in 1976–77 to 128 65 million square metres valued at Rs. 87 74 crores in 1983–84 Employment will increase from 8 08 lakhs in 1976–77 to 13 43 lakhs in 1983–84.

Woollen Khadi. It is proposed to introduce *inter alia* 22,730 traditional charkhas 5,600 traditional Bageswari charkhas, 9,500 ring spinning charkhas 2,300 traditional looms, and 8,200 improved looms Twenty-three carding plants, 31 hosiery units, 22 dye houses, 11 finishing plants, 8 anti-shrink process plants, 4 combing plants and 485 common worksheds will be set up The outlay required is Rs 100 46 crores Production will increase from 8 00 million sq metres valued at Rs 14 00 crores in 1976–77 to 12 00 million sq metres worth Rs 36 00 crores in 1983–84 Employment will increase from 1 80 lakh persons in 1976–77 to 5 10 lakh persons in 1983–84.

Silk Khadi It is propsed to set up *inter alia,* 438 mulberry and muga reeled silk units, 204 tussar reeled silk units, 1,131 non-mulberry silk waste (spun silk) units and 474 mulberry waste (spun silk) units The outlay during the Six-year Plan will be Rs 163.54 crores. Production will increase from 2 2 million square metres valued at Rs. 5 00 crores in 1976–77 to 26 32 million square metres worth Rs 65 80 crores in 1983-84 Employment will increase from 0 35 lakh persons in 1976–77 to 1 36 lakh persons in 1983–84

Ghani Oil Under ghani oil industry, 6,000 improved ghanis and 20,000 power ghanis will be introduced It is proposed to construct 6,000 ghani sheds and 1,200 godowns The outlay during the Plan period will be Rs. 152 26 crores The production will increase from 14 24 lakh quintals of oil and oil cake valued at Rs 48 00 crores in 1976–77 to 167.65 lakhs quintals of oil and oilcake worth Rs 565 00 crores in 1983–84. Employment will increase from 0 37 lakh persons in 1976–77 to 2 23 lakh persons in 1983–84

Village Leather It is proposed to set up *inter alia* 2,500 flaying platforms, 500 tannery units, 500 leather goods units, 1,000 footwear units, and 1,100 footwear and leather goods shops during the Plan period The outlay during the Plan period will be Rs 42 40 crores The production will increase from Rs 12 50 crores in 1976–77 to Rs. 55.18 crores in 1983–84. Employment will increase from 0 55 lakh persons in 1976–77 to 2 06 lakh persons in 1983–84.

Cottage Match During the Plan period, 53 A type units, 117 B type untis, 490 C type units, 6,000 home units, 18 central marketing depots and 55 small marketing depots will be set up. The outlay required will be

Rs. 12 69 crores. The production will increase from Rs 0.88 crores in 1976–77 to Rs 18 16 crores in 1983-84 Employment will increase from 0 04 lakh persons in 1976–77 to 1 11 lakh persons in 1983–84.

Canegur and Khandsari During the Plan period, 10,000 bullock driven units, 5,000 small power driven (gur) units, 900 medium gur units, 330 hydraulic khandsari units, and 20 gur godowns will be set up The outlay required will be Rs 40 62 crores. The production will increase from 29 67 lakh quintals of gur and khandsari valued at Rs 42 00 crores in 1976–77 to 57.80 lakh quintals of gur and khandsari worth Rs 78 98 crores in 1983–84 Employment will increase from 1 32 lakh persons in 1976–77 to 3 00 lakh persons in 1983–84

Palm Gur The Plan visualised an outlay of Rs 22 95 crores on palm-gur industry, The production will increase from Rs. 12 53 crores in 1976-77 to Rs 20 42 crores in 1983–84. The employment will increase from 3 33 lakh persons in 1976–77 to 10 00 lakh persons in 1983–84.

NEO & Soap It is proposed to set up 1,600 centres, 200 godowns, 80 expellers, 3 solvent extraction plants, 1,800 soap (individual) units, 400 soap units, 55 toilet soap units and 600 sales promotion units during the Plan period The outlay will be Rs. 32 01 crores Production will increase from 136 50 lakh kgs of soap valued at Rs. 5.50 crores in 1976–77 to 446.73 lakh kgs of soap worth Rs 18 00 crores in 1983–84. Employment will increase from 1.25 lakh persons in 1976–77 to 11 20 lakh persons in 1983–84.

Handmade Paper. In addition to the existing units, 80 more units would be set up during the Plan period The outlay required is Rs. 4.65 crores. Production will increase from 3,800 tonnes valued at Rs. 1.50 crores in 1976–77 to 8,000 tonnes at Rs. 4.80 crores in 1983–84. Employment would increase from 0 04 lakh persons in 1976–77 to 0 09 lakh persons in 1983–84.

Bee Keeping By the end of the Plan period, 19.00 lakh bee colonies would be set up. The industry requires an outlay of Rs. 4 75 crores. The production will increase from 32 40 lakh kgs. valued at Rs. 3 24 crores in 1976–77 to 114 00 lakh kgs valued at Rs. 11.40 crores in 1983–84 Employment will increase from 1 50 lakh persons in 1976–77 to 3 00 lakh persons in 1983–84.

Village Pottery. For the Plan period, the industry needs an outlay of Rs. 79 11 crores The production will increase from 7 88 crores in 1976–77 to 100.00 crores in 1983–84. The employment will be 4 25 lakh persons in 1983–84 as compared with 0.68 lakh persons in 1976–77.

Fibre. An outlay of Rs. 9.91 crores will be required by the industry during the Plan period. During the period, *i e.*, from 1976–77 to

1983–84 the production will increase from Rs 5 35 crores to Rs 34 21 crores, and employment from 0 69 lakh persons to 3 99 lakh persons

The Annual Report of the Ministry of Industry for the year 1978–79 has also laid considerable stress on the performance as well as given an indication that could be planning for development of Handloom, Handicrafts and Coir industries These are given below

Handlooms Handloom sector has been assigned an important role in the new Textile policy Most of the additional requirements of cloth will be met by the handlooms Production will be stepped up from its present level of 2,300 million metres to 3,700 million metres by the end of the current Plan (1983). This sector will also be developed to take up production of entire requirement of controlled cloth in a phased manner Assistance and support for the development of the sector is provided through the Development Commissioner for Handlooms and the All India Handloom Board The employment potential of handlooms is both direct and indirect. It is estimated that in direct employment itself, it would provide 3 5 million jobs by the year 1983

Intensive Development Projects There were 21 Intensive Development Projects and 4 more projects have been added during 1978–79. bringing the total number of projects to 25. Each of these projects cover 10,000 handlooms In addition, 21 Export Production Projects covering 1,000 handlooms in each project are also under implementation. More projects are contemplated under the Sixth Plan for consolidating the handloom sector.

Handloom Cooperatives. On the cooperative front, 4,436 more handlooms have been brought under cooperative coverage, bringing total coverage to 12 55 lakh handlooms as on 31st March, 1978 2,254 societies have also been revived and/or newly formed These activities have brought about 2 lakh handloom weavers under the cooperative fold Sizable assistance has also been given to apex handloom societies/handloom development corporations for procuring and marketing of handloom products, for creation of pre-loom and post-loom processing facilities and promotion of hank yarn of required counts and quality to handloom weavers Efforts have also been made to ensure a full flow of credit from institutional agencies under the Reserve Bank of India scheme of Handloom Finance to Handloom Cooperatives and to weavers outside the cooperative fold

Janata Cloth Production of janata cloth in the handloom sector has been accelerated About 82 million metres have been produced up to the end of March, 1978. This is expected to go up to 200 million metres by March. 1979 and to 500 million metres by the end of the current Plan (1983) About one lakh of handlooms providing employment to about 4 lakh persons are engaged in production of janata cloth. The production of janata cloth would be stepped up to provide more employment

Weavers' Service Centres There have also been notable achievements on the technical development side. While two more Weaver Service Centres at Jaipur in Rajasthan and Hyderabad in Andhra Pradesh have been opened, two other Centres at Madhbani in Bihar and Srinagar in Jammu and Kashmir are expected to come up during the current year, 1978-79 There will thus be 25 Weavers' Service Centres by the end of March, 1979 The two Institutes of Handloom Technology at Varanasi in Uttar Pradesh and Salem in Tamil Nadu continue to provide technical personnel required by the handloom industry It is proposed to strengthen, consolidate and further expand the activities of these centres to provide for technical guidance as an integral part of infrastructural base for development of handlooms

Handicrafts The All India Handicrafts Board was set up in 1952 to advise the Central Government on the problems of handicrafts and suggest measures for improvement and development, including technical, marketing, financial, organizational aspects of handicrafts. The Board functions through 5 Regional Offices. 4 Regional Design and Technical Development Centres and a Crafts Museum Besides, there are a chain of Marketing and Service Extension Centres, Training and Development Centres in Carpet Weaving, Cane, Bamboo and Metal Crafts, etc The Board has been organised into 8 Craft Divisions covering major crafts and Service Divisions for planning, research design, training, etc

Thirty-three Marketing and Service Extension Centres of the Board identified and enrolled 3,500 units, employing more than 15,000 artisans, with annual production of about Rs. 8 crores The Centres arranged credit facilities to the tune of Rs. 6.40 lakhs to about 250 craftsmen, 4 product promotion programmes, 6 market meets and 2 market analysis programmes were ornanized by these Centres during 1978-79

Under the massive training programme, 45,000 carpet weavers are to be trained during 1978-79. 607 training centres were run partly by the Board and partly through State Handicrafts Corporations Additional 127 such centres have been sanctioned during 1978-79 Training programmes are proposed to be stepped up for employment generation during the Sixth Plan.

Coir Industry. The coir industry in India is essentially in the cottage sector dispersed mainly over the west coast in Kerala where natural retting facilities of coconut husks exist It is fast developing in other states like Andhra Pradesh, Karnataka, Orissa, Tamil Nadu, etc.

The Coir Board, a statutory body established by the Central Government, undertakes activities of promotion and development of the coir industry, It undertakes the export of coir and coir goods, research for product betterment modernisation of manufacturing techniques, fixing grade and standards and arranging inspection of coir goods, and generally improving their marketing both within and outside the country.

New National Policy for Full Employment

Although a number of attempts have been made during the last thirty years to deal with the problem of rural unemployment and underemployment their net impact on employment generation has not been commensurate with efforts Some of the other programmes with employment as one of the contents have been the Small Farmers' Development Agency (SFDA) with which the Marginal Farmers and Agricultural Labour Development Agency has now been merged the Drought Prone Areas Programme, the Integrated Tribal Development Projects, Hill Area Development Programme, Intensive Cattle Development Programme and a large number of special programmes for development of specific crops Their contribution to general economic development has been significant but as these programmes and schemes did not have employment as their direct thrust, their net impact on the unemployment situation has at best been marginal

Keeping in view the triple objective of employment generation, removal of poverty and reduction in disparities of incomes, the Sixth Five-year Plan has outlined a time-bound 10-year Programme to create conditions of full employment in rural areas It aims at an employment growth rate of 5.3 per cent so as to provide employment to the new entrants to the labour market as well as make a significant dent on the vast and complex problem of rural unemployment and underemployment

The basic postulate of the new policy is that the bulk of commodities consumed by the rural poor should be produced in the small and tiny sectors which have the maximum employment generation potential. Moreover, the large-scale sector is also expected to utilise more of labour absorption than of labour-saving technology

Some of the more important components of the new policy are as follows:

1 *Increase in Irrigation Projects of all the Three Types, i e, Major, Medium and Minor with a Higher Priority for Minor Irrigation Works* The raising of employment potential, both direct and indirect, of irrigation projects has been well recognised Apart from the large number of persons employed directly in new irrigation works with their distributaries, the possibilities of employment potential in transformation of agriculture from dryland or monsoon-fed irrigation to wet cultivation with multiple cropping as well as with promotion of allied occupations like dairy development are tremendous Provision of suitable infrastructure both for supply of inputs as well as credit, roads, electricity and for marketing, warehousing and processing of agricultural produce is bound to generate an upward thrust in production, year-round employment and diversification of occupations including secondary and tertiary ones

2 *Land Distribution and Consolidation of Holdings* It is proposed to implement land distribution schemes as a part of the large programme of

land reform measures The lessons of colonisation schemes as well as of distribution of small plots of land to the landless have shown that unless accompanied by a coordinated scheme of land development, irrigation, input supply, credit support, extension and linking with a marketing system, these have only led to infructuous expenditure and not commensurate advantage to beneficiaries As a distinct policy-instrument of employment generation, the implementation of these schemes can be expected not only to generate employment but also lead to higher incomes for these poverty groups Consolidation of londholdings holds out promise not only of better utilisation of available resources with farmers but also of more investments by farmers out of their own savings. It can also be expected to generate more employment as a consequence of higher levels of investments and better utilisation of resources.

3 *Regulation of Growth of Farm Mechanisation.* Although the initial impact of the new agricultural technology on employment has been in favour of diversification of skills and occupations, reduction in seasonal unemployment and of creation of more employment opportunities, large-scale introduction of labour saving mechanical devices is likely to lead to labour displacement as well as of reducing the labour absorption capacity of modern agricultural technology The new national policy has, therefore, sought to regulate the growth of farm mechanisation, in a developing country like India with an abundance of manpower

4 *Supply of Inputs as well as Expansion and Consolidation of Infrastructural Services* The existing position regarding the supply of inputs is that in agricultural production, apart from irrigation facilities which are being extended during the current Plan, supply of seeds and fertilizers, plant protection, material and equipment and related inputs is made through governmental, cooperative, public and private sector channels In the case of rural industries, excepting for limited supplies in the cooperative and public sectors, the bulk of the supplies of raw-materials are still in the private sector. For meeting the common requirement of credit for development of agriculture as well as for rural industrialisation, organized efforts are being made within institutional financing agencies to increasingly meet the requirements of the weaker sections It is expected that the percentage of institutional finance would be increased during the Plan period so as to cover at least 60–65 per cent of the total credit requirements.

The more important factor, however, is effective utilisation of inputs including the credit for production purposes. For this, an organised effort has to be made not only in making the knowledge about the technology available to the target groups but also in meeting some of the on-going consumption requirements of the weaker sections to prevent diversion of credit to non-production items.

Another aspect of the infrastructure is a planned expansion of Revised Minimum Needs Programme which would take care not only of roads and electricity but also of essential social services including health care and educational facilities

Another important aspect of the infrastructural facilities is reorganisation of marketing channels to enable the primary producer to take full advantage of the gains of development At present, excepting for limited regions and sectors in which marketing cooperatives have made some more progress, the bulk of marketing of rural production is in the hands of private traders, retail as well as wholesale, with their linkages extended right up to cities, metropolitan centres and again the network of wholesale and retail leaders through which various commodities are purchased by the consumers. There is need for an urgent attention to provide a planned expansion of alternate cooperative warehousing and trade channels supported by banking institutions which would help to provide not only more incomes to the primary producers but also supply commodities at cheaper prices to the consumers If the marketing infrastructure is not effectively reorganised, all efforts at employment generation, raising income levels and removal of poverty would be rendered useless

5. *Reorientation of Science and Technology, Research and Development of Appropriate Technology to Improve Production Potential of Agricultural and Rural and Small-scale Industrial Activities* The issues relating to evolving an appropriate technology not only for rural and small-scale industries but also for agriculture and allied occupations require to be studied in greater depth. Some of the basic ones are in terms of the relative proportions of labour-capital intensity, benefit-cost ratios, input-output efficiencies measured not only in terms of private rates of return but also of the social rates of return, making appropriate technology available to small producers with a low resource and capital base as well as the social costs involved in bringing the large sections of rural population within the organised sectors of the economy

The problem of modernisation of technologies has to be viewed in the larger perspective of more effective utilisation of the vast manpower resources available as well as of the limited resources available for making the production units more capital intensive. Some of the unresolved issues in this have been highlighted in the report of the Working Group on Development of Village and Small Industries when they have pointed out that creation of larger employment opportunities at lower capital costs has been one of the major objectives of small-scale industries development. "Various promotional measures adopted from time to time were expected to promote these objectives The objective has not, however, been achieved and some of the incentives, concessions and fiscal measures evolved under the objective have in fact gone to negate it For example, the 15 per cent

capital subsidy for backward areas is related to investment in machinery and equipment which naturally results in over capitalisation and does not take into account the employment angle Again, the rate of interest on working capital, which is more important to labour-oriented industries, is much higher than the rate of interest on term loans which becomes favourable to capital intensive industries" The net implementational impact of this policy, therefore, has been to reduce employment potential rather than to enhance it as was visualised in the original policy.

Another example is recommended technology in the groundwater utilisation with deep tube-well prospecting and utilisation which in the case of large farmers has led to lowering of water-table of wells and shallow tube-wells belonging to the small and marginal farmers. Therefore, this problem of appropriate technology which will be really beneficial to the large number of small and marginal farmers on the one hand and the very small producers in the rural industries will require a very careful consideration In fact, there is need to take new approach to research and development in relation to evolving appropriate technology more suited to spreading gains of development to a large number of small producers both in the agricultural and allied as well as in rural industries sectors

Review of Employment Generation Programmes and Guidelines for Future Policy

At the outset, it was indicated that there is widespread underemployment, disguised unemployment with variations in levels of development in different regions, a highly skewed distributional pattern of resource base in the form of landholding, production-orientations and leveles of technology adopted, disparities in incomes, savings and investment potentials, risk-taking and entrepreneurial capacities, inequalities in educational levels, access to information as well as socio-cultural factors including caste, dependency on traiditional sources of employment and low levels of aspirations

Despite the rise in production levels in the organised sector, the rise in employment has not been commensurate with such an increase The unorganised sector, which mainly includes agricultural production and allied occupations as well as rural industries which has a higher employment potential has not been provided with sufficient employment for even the existing work force in this sector. The continued increases in the backlogs of rural unemployment during successive Plans only prove that employment generation was not given a sufficiently high priority.

The review of various employment generation programmes in rural areas including Rural Works Programme, Crash Scheme for Rural Employment, Pilot Intensive Rural Employment Projects, Employment Guarantee Scheme of Maharashtra and the Food for Work Programme shows that we

have made some impact on the vast problem of unemployment and under-employment in rural areas The new approach to Integrated Rural Development Programme can be expected to provide a working base for tackling this problem.

At the same time, the problem of resource mobilisation, excepting in the case of Employment Guarantee Scheme of Maharashtra in which the effort has been made to raise resources both from urban and rural areas, does not appear to have been given adequate attention. In resource mobilisation, there is a general belief that the more well-to-do farmers, who by and large have benefited from the new agricultural technology and the various policies of the government including the price support, have not been required to contribute to the public exchequer commensurate with their increased capacity to pay There is also a point of view that the continued reliance on indirect taxes which, by and large, are regressive in character and operate more heavily on the lower income groups, have contributed a larger share to the public exchequer than direct taxes.

In any massive programme of employment generation, land reforms have to find an appropriate place These would ensure more productive utilisation of the basic resource of land in favour of small and marginal farmers, unrecorded sharecroppers and eligible landless labourers who are still to get their share out of the land acquired under the Ceilings legislations giving ownership rights This may be considered as only the first step in making these groups below the poverty line as viable farmers What is much more important is to provide an integrated policy-frame of supply of inputs, credit, extension service about the latest technology available as well as build up a network of infrastructures for various occupations and target groups interlinked within the framework of integrated area planning into which all the viable economic projects have to fit in It is only in this perspective that employment generation within the next decade can be planned in a more systematic manner.

The working of the various special programmes has shown that all these now require to be reconsidered within the overall perspective of micro-level planning for rural development with block as the basis with the district as the supportive level for planning and implementation. The district level itself is expected to be a part of multi-level planning system in which local, regional and national planning would be conceived in a mutually supportive system

There is need to link the employment generation programmes, adult education and development of skills for production and entrepreneurial capabilities through a national training system with support from different departments and institutions Adequate provision of health services would also require to be considered as an integral part of employment generation

programmes and not treated as dependent programmes Basically, adult education training and health services are meant to promote productivity and employment

There is an urgent need to have the employment generation programme as part of national policy-frame in which incomes and wages, price stabilisation, fiscal and monetary policies, reservation for protected sectors which are specifically meant for employment generation, have to be viewed as total integral complex. We can no longer look upon employment generation as an unsupported programme unrelated to other important facets of economic and social development

Finally, employment generation has to be looked upon as a measure of distributive justice to tackle the basic problems of poverty, unemployment, and inequality so that we can usher in a new era of prosperity for the vast millions who have waited so long even after Independence. We are confident that the new national policy of full employment within a time-frame of ten years would be implemented rigorously and efficiently

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PROGRAMMES FOR SCHEDULED CASTES

B N Gupta

According tot he Twenty-fourth Report of the Commissioner for Scheduled Castes and Scheduled Tribes, the Scheduled Castes constituted 8.25 crores forming 15 04 per cent of the total population of the country on 1971 census while the Scheduled Tribes constituted 7 5 per cent of the population and numbered 4.12 crores The Scheduled Castes are not in a majority in any part of the country They, however, constitute more than 20 per cent of the total population in 666 taluks They live interspersed with the other sections of the population. But the Scheduled Tribes are in a majority in 329 taluks and on the criterion of 50 per cent of the population being Scheduled Tribes areas have been identified in the country in which 65 per cent of the Scheduled Tribes live (Table 1)

There are some important features that are associated with the Scheduled Castes. These are (1) stigma of untouchability, (2) lower social status, (3) unclean occupation, (4) poverty and unemployment, (5) lack of education, (6) general backwardness, low level of living and inferior quality of life; (7) less privileged, and (8) lack of mobility

Consecutive census reports have shown that the participation rates of the Scheduled Caste and Scheduled Tribe males and females in the working force are higher than those amongst the rest of the population, although the data provided by the last two censuses are not fully comparable The higher rates of participation in the working force are indicators of the helplessness of these communities In 1971, 82 3, 8.1 and 9 4 per cent of Scheduled Castes were engaged in the primary[1], secondary[2], and tertiary[3] sectors, respectively

Untouchability

Untouchability is a curse for the Indian society It causes frustration inflicts a mortal blow to self-confidence, gives rise to defeatism and fatalism, saps initiative, generates a sense of inferiority complex, leads to complacency, undermines the spirit of motivation, encourages selfishness, alienates

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1 Primary sector includes workers engaged as cultivators, landless labourers and in mining, quarrying, livestock, forestry, fishery, hunting and plantations, orchards and allied activities

2 Secondary sector includes workers engaged in household industry, manufacturing, other than household industry and construction.

3 Tertiary sector includes workers engaged in trade and commerce, transport, storage and communication and other services

Table 1 : Population of Scheduled Castes and Tribes (1971 Census)

	Scheduled Castes	Scheduled Tribes
INDIA	8,00,05,398	3,80,15,162
States		
Andhra Pradesh	57,74,548	16,57,657
Assam	9,12,557	16,06,648
Bihar	79,50,652	49,32,767
Gujarat	18,25,423	37,34 422
Haryana	18,95,933	—
Himachal Pradesh	7,69,572	1,41,610
Jammu & Kashmir	3,81,277	—
Karnataka	38,50,034	2,31,268
Kerala	17,72,168	2,69,356
Madhya Pradesh	54 53,690	83,87,403
Maharashtra	30,25,761	29,54,249
Manipur	16,376	3,34,466
Meghalaya	3,887	8,14,230
Nagaland	—	4,57,602
Orissa	33,10,854	50,71,937
Punjab	33,48,217	—
Rajasthan	40,75,580	31,25,506
Sikkim	9,502	—
Tamil Nadu	73,15,595	3,11,515
Tripura	1,92,860	4,50,544
Uttar Pradesh	1,85,48,916	1,98,565
West Bengal	88,16,028	25.32,969
Union Territories		
Andaman & Nicobar Islands	—	18,102
Arunachal Pradesh	339	3,69,408
Chandigarh	29,073	—
Dadra & Nagar Haveli	1,332	64,445
Delhi	6,35,698	—
Goa, Daman & Diu	16,514	7,654
Lakshadweep	—	29,540
Mizoram	82	3,13,299
Pondicherry	72,921	—

the people from their environment, results in their withdrawal from the process of development and change, and enables the exploiting class to continue with their tyranny against the vast sections of impoverished masses. By inflicting untold suffering on its victims, untouchability degrades human

beings and reduces freedom to a mockery It is a glaring symptom of a social and economic order which exists on exploitation of man by man, and nourishes and sustains social oppression and injustice

The idea of untouchability which conveys a sense of defilement and pollution existed in India from very ancient times Manu says, "But the dwelling of the *"Chandals"* shall be outside the village, they must be made *"apapatras"* and their wealth (shall be) dogs and donkeys" They were regarded as *avarnas* or outcastes, as distinguished from the *Savarnas* or people belonging to the four *varnas*. These untouchables were also designated by certain ancient law-givers as the *panchamas* or the fifth order

The four-fold *varna* system gradually proliferated into thousands of castes and sub-castes, arranged in an inconceivably complicated but generally well recognised hierarchical pattern of social status

Untouchability is based on the concept of pollution and purity which again is attributed to the caste and the occupation of a particular group of people People who dealt with polluted objects were considered low in the caste hierarchy because of transmitted pollution and those who dealt with pure objects remained at the top of social hierarchy. The caste system emerged according to the association of individuals with different functions they performed in the society The ideological justification of caste system found expression in the doctrine of Karma (the piled-up effect of good or bad work done in the previous births) The caste system was ultimately transmitted to the position of birth and functions performed by individuals followed the eoincidence of birth

Why Preferential Treatment to Scheduled Castes?

The Scheduled Castes have suffered from the "Culture of Repression" of the caste people for several centuries Foreigners describe this as *Internal colonialism* or *domestic colonialism* of the high or dominant caste landlord and the moneylender in India As a result of this repression, the Scheduled Castes were severely conditioned by the "Culture of Silence". They have internalised the inequitous social structure within their personalities so that even the well intentioned efforts of planners could not achieve much for them The disablilities caused by the forces released through psycho-culture have been persistently operating among many of the job-seekers which keep them behind in the race of competition. Therefore, preferential treatment to Scheduled Castes is essential to bring them up and compensate them for the disadvantages they have been suffering from

The gross injustices, inhuman cruelties and untold barbarities perpetrated on the Sheduled Castes through India's trackless centuries are far too well known to need repetition or enumeration. They have been the victims of a crystallised prejudice structure based upon a variety of factors, including the economic prejudice which leads to the economic segregation of the

Scheduled Castes into a few low-paid occupations outside the precincts of the main village This occupational segregation seriously restricts their vertical mobility and tends to perpetuate their low economic status. The low economic status in turn reinforces the prejudice structure Preferential treatment through constitutional safeguards and executive orders is an attempt to break this vicious circle, and provide them better employment opportunities

Though untouchability has been constitutionally and legally abolished in India, yet it is being practised in rural areas It is common experience of the Scheduled Castes that in most cases oppression by caste Hindus, the police and the lower echelons of the administration, who themselves generally belonging to the higher castes, side with the perpetrators of the cruelty. The killing and burning of Scheduled Castes by upper-caste Hindus is frequently reported in the press But few of the accused are known to have been awarded deterrent punishment for such crimes With regard to social crimes, the law generally operates against the Scheduled Castes and in favour of the higher castes The decision of the Bihar Government to ultimately arm Scheduled Castes in certain districts of Bihar so that they could safeguard their interests depicts the pitiable position of the sufferers Therefore, through preferential treatment and by providing them reservation of jobs it is possible to reduce, if not stop, the curse of untouchability from rural India

Our planned efforts to bring obout change has undoubtedly improved the exploitation of land and natural resources but rarely made the Scheduled Castes an effective partner in the process of development and failed to bring them into the mainstream of the social and economic life of the community. Most of the programmes of rural development require the maximum possible mobilisation of the rural masses in a national constructive effort on a gigantic scale This demands application of mass sanctions and involves massive socialisation and wide cooperation among the rural people in a positive developmental effort All this becomes impossible in the absence of horizontal and vertical mobility of the people. Preferential treatment to Scheduled Castes is a method to provide them opportunities to increase their mobility and to resolve conflicts which are manifestations of the frustration and tension accumulated over decades of waiting to enjoy the fruits of impending socialism which was promised by the government

Agencies Formulating the Programmes for Scheduled Castes

The following are the agencies which formulate and/or implement the programmes for the welfare of Scheduled Castes (1) Central Government; (2) State Governments, (3) Union Territories, and (4) Voluntary Organisations engaged in the welfare of Scheduled Castes.

The Constitution of India has reserved certain proportion of seats in the Parliament and the Legislatures for the representatives of Scheduled

Castes Certain percentage of government jobs also have been reserved for the Candidates of Scheduled Castes The reservation of seats, initially envisaged for a period of only ten years, has been extended till January 25, 1980. Over the years, the government have also tried to induce quasi-governmental and non-governmetal institutions to reserve certain proportion of jobs for the Scheduled Castes Undoubtedly, the egalitarian provisions of the Constitution are unexceptionable, laudable, and even revolutionary in the context of Indian social tradition But these constitutional and legal safeguards by themselves are inadequate as instruments of fundamental change.

1 Centrally-sponsored schemes like post-matric scholarships, construction of hostels for Scheduled Caste girls, coaching and allied schemes, cooperation, research and training, machinery for the enforcement of Untouchability (Offences) Act, etc. involving an outlay of Rs. 106 94 crores during the Fifth Plan were sanctioned by the office of Directorate Genral for Backward Classes located at Delhi For these schemes the Gevernment of India gives cent per cent grant to States / Union Territories. The regional organisations undertake surveys/studies with reference to the above mentioned schemes which have not substantially improved the working of the schemes.

2 All remaining schemes are implemented by the state governments. The State-sector Schemes are formulated according to local needs. These are also aided by the Central Government according to the principles decided by the National Development Council Central assistance is given in the shape of block loans and block grants The State Governments have also been given wide powers under the protection of Civil Rights Act, 1955, to enable the eradication of untouchability with particular reference to the provision of adequate facilities including legal aid, appointment of officers for initiating or exercising supervision over prosecutions for the contravention of the provisions of the Act, setting up of special courts for the trial of offences under the Act, setting up of committees at appropriate levels for formulating or implementing measures, undertaking periodic surveys regarding the working of the Act with a view to suggesting measures for its implementation and identification of areas in respect of untouchability and adoption of measures for its removal. The Central Government is hoping to frame rules under section 15A (1) to enable the state governments to ensure that the rights accruing from the abolition of "untouchability" may be availed of by the concerned persons

Commissioner for Scheduled Castes

Under Article 338 of the Constitution, a Special Officer for the Scheduled Castes and Scheduled Tribes is appointed by the President. He investigates all matters relating to the safeguards provided for them under the Constitution and reports to the President upon the working of those safeguards at such intervals as the President may direct. The President causes all such reports to be laid before each House of Parliament.

The first special officer designated as Commissioner for Scheduled Castes and Scheduled Tribes was appointed by the President on November 18, 1950 Every year he prepares a report upon the working of the safegards provided for the Scheduled Castes and Scheduled Tribes So far 24 Reports have been submitted to the President The twenty-fourth report is a combined Report for two years (1975-76 and 1976-77)

In order that the reports submitted to the Parliament are accurate and dependable, it is necessary that the data on which they are based is collected and assessed by an independent and impartial agency, applying uniform methods and uniform standards. The office of the Commissioner started with a small staff working directly under him In course of time, the Commissioner was provided with a field organisation consisting of 17 offices in various states owing allegiance to him and working according to standards and norms laid down by him Unfortunately, the Commissioner's organisation was stripped of its regional offices in 1967, and the Commissioner was obliged to function only from his headquarters at New Delhi with a limited staff to look after the working of constitutional safeguards applicable to more than one-fifth population of the country.

This decision has been criticised by a number of committees. The Committee on the Welfare of Scheduled Castes and Scheduled Tribes under the chairmanship of Shri D. Basumatari in its first Report presented on 26th November, 1969, expressed its view "that by abolishing the field organisation of the Commissioner, the Government have not only crippled the organisation of the Commissioner and deprived him of his 'eyes and ears' in the country but have also denigrated his office, his status, his authority and his capacity to discharge his constitutional obligations". Thus the abolition of regional field organisation has not only reduced the orbit of his effective exercise but it has also deprived him of the facility of making frequent on-the-spot enquiries into the condition of Scheduled Castes It is the most unsatisfactory arrangement where the commissioner is required to discharge his constitutional functions through the very agencies on whose performance in certain spheres he may be called upon, by virtue of his office, to sit in judgment

At present there are three possible alternative arrangements to investigate matters relating to the safeguards provided under the Constitution These are as under

1. *To request the State Governments to furnish information on the safeguards provided and the machinery provided for their enforcement* This is not a very happy situation as is clear from the case illustrations cited earlier because the functions of investigation involve the exercise of judgment and discretion in the collection and assessment of data It was suggested by the Commissioner for Scheduled

Castes and Scheduled Tribes to the State Government / Union Territory Administrations that they should set up Commissioner's Cell to collect information on various circulars/letters addressed by their organisation It is hoped that necessary steps would be taken by State Governments in this regard.

2. *To ask Zonal Directors of the Backward Classes Welfare to supply the requisite information.* The offices of the Zonal Directors are located at Chandigarh, Ahmedabad, Madras, Bhopal and Patna. The Zonal Directors have also been designated as ex-officio Deputy Commissioners for Scheduled Castes and Scheduled Tribes but this arrangement of merely designating them has not been of much help The reason is obvious. Quite often it has been found that the Zonal Directors do not give due attention to the assignments given to them by the Commissioner and concentrate on the work assigned to them by the Director General, Backward Classes Welfare Another important function of the Zonal Offices is to inspect the working of voluntary organisations which are given grant-in-aid out of the annual budget of Rs 40 00 lakhs provided for the purpose.

3 *To ask the inspecting team of the Office of the Commissioner for Scheduled Castes and Scheduled Tribes to go to the area of investigation and submit a report.* So far only one Research Officer without any supporting staff has been posted. This is totally inadequate for a country of the size of India. Therefore, it is hoped that the Government will initiate immediate steps to strengthen the headquarters office of the Commissioner and restore the regional offices to enable the Commissioner to discharge his constitutional duties effectively.

Programmes for Scheduled Castes

Special development programmes were taken up under the Five-year Plans to improve the educational and socio-economic conditions of the persons belonging to Scheduled Castes and Scheduled Tribes. From plan to plan, the size of the investment on the supplementary special programmes had been raised and till the end of the Fourth Five-year Plan, an expenditure of Rs. 444 69 crores was reported to have been incurred Besides, the State Governments were also spending sizeable amounts for the welfare of these communities from their non-plan budgets. The revised Fifth Plan outlay on programmes for Scheduled Castes in the Central sector and State and Union Territories sector was Rs. 118.88 crores and Rs. 208.11 crores, respectively. These programmes could be divided into the following three broad categories: *(a)* Educational Concessions; *(b)* Economic Development; and *(c)* Improvement of Basties-house sites and housing schemes.

(a) Educational Concessions The assistance given to the Scheduled Castes in the field of education consists of· *(i)* exemption from payment of tution and examination fees and award of scholarships, *(ii)* opening of government hostels for boys and girls, and *(iii)* payment of grant-in-aid to voluntary agencies for running hostels for boys and girls

The students belonging to Scheduled Castes are exempted from payment of tution and examination and other compulsorily payable fees at all levels of education, irrespective of age and income Such fees are reimbursed to the educational institutions by the respective Social Welfare Departments For pre-matric standards the State Governments reimburses, and for post-matric study the Central Government is the reimbursing authority This scheme is intended to cover most of the expenses of education Only two children of the same family for all time to come are entitled for post-matric scholarships If a Scheduled Caste scholar pursuing *Medical and Engineering courses fails in the examination for the first time* the award may be renewed For second and subsequent failures in any class the student shall bear his own expenses until he secures promotion to the next higher class. A few seats are also reserved in the Armed Forces Medical College, Poona and in the Kendriya Vidyalayas There are also few overseas scholarships to deserving candidates for post-graduate study and research in the subjects for which suitable facilities are not available in India, preferably in Engineering, Technology, Medicine, Agriculture and Science

b) *Hostel Facilities.* One of the most important reasons for the tardy growth of education among the Scheduled Castes is lack of residential facilities for students belonging to the communities, whose homes are generally far from schools. The homes of these students also do not play a complimentary role in their physical and mental growth. Hostels, therefore, have an important role to play in the efforts for the educational advancement of these communities Provision of hostels for the Scheduled Caste boys and girls is one of the important programmes included in the Fifth Five-year Plan

In order to enable students belonging to the Scheduled Castes to take advantage of educational concessions, hostel facilities are provided by the government In these hostels, all facilities including those of free boarding and lodging, text-books, stationery articles, uniform and bedding, free medical aid, conveyance and coaching facilities are provided The number of Backward Classes hostels in Bihar, Kerala and Rajasthan is inadequate.

The Centrally-sponsored Scheme of hostels for Scheduled Castes was started during the Third Five-year Plan. The scope of the scheme has been expanded in the Fifth Five-year Plan In the integrated scheme, the central sector will provide for *(i)* the hostel building, *(ii)* furnishing of hostels, *(iii)* initial equipment for crafts like sewing and embroidery, *(iv)* initial

grant of necessary equipment for cultural activities, and *(v)* initial grant for rotating capital for attached agricultural plots, etc to enable the hostels to develop as multipurpose institutions where the girls can be trained in arts, crafts, skills, games, housekeeping, etc. Scheduled Caste girls studying in professional institutions like those for Typing, Stenography, Nursing, Midwifery, etc. are also eligible to be admitted to these hostels. The rates of grants-in-aid to these hostels were fixed as far back as 1960. These rates have since been revised during 1975–76. According to the revised rates, the maximum grant-in-aid that can be given under the scheme is Rs. 3.200 per student if accommodation only is provided and Rs. 4,450 per student if accommodation as well as ancilliary facilities like dining hall, kitchen, sanitary blocks, etc. are also provided. The voluntary agencies are also entitled for grants-in-aid for running hostels for boys and girls.

c) *Ashram Schools.* Ashram Schools are residential schools which also provide free boarding and lodging facilities to the tribal students In some states such schools have also been established for Scheduled Castes and other Backward Classes. Besides general education, these schools also impart craft-based education to the students These schools are run by the State Governments and non-official agencies

Economic Development

Efforts have deen made for economic upliftment of the Scheduled Castes, in addition to educational and social programmes. The base of such programme was to bring speedier economic and social justice to them and for ensuring their rightful place in society. The important components of the economic programmes are *(i)* strict enforcement of Land Reform Acts, *(ii)* implementation of agricultural land ceilings and speedier disiribution of surplus land; *(iii)* compilation of land records; *(iv)* liquidation of rural indebtedness; *(v)* abolition of the system of bonded labour; *(vi)* review and enforcement of laws on minimum agricultural wages: *(vii)* supply of essential agricultural commodities at controlled prices, *(viii)* training for self-employment for agricultural and allied occupations and for non-farm jobs; and *(ix)* reservation of jobs, concession in age limits–counselling and guidance services.

Land Reforms. There are more than 150 Land Reform Acts in force in the country. The beneficiaries of these enactments are mostly the Scheduled Castes. But the politics of land reforms has made the desired changes unworkable and reforms have turned out to be a mirage. Easy possibility of *benami* transfers and the lack of proper and up to-date land records have throttled the reforms.

The work relating to allotment of surplus land to landless was taken up by the states. Many state governments also reported that they had distributed other types of land as well to Scheduled Castes. Accurate information

regarding this is not available but everybody seems to agree on one point that there has been growth without equity . the benefits have not accrued to the Scheduled Castes, as much as was expected and some new problems have cropped up

Important findings of the surveys/studies undertaken regarding allotment of land to Scheduled Castes reveal that *(i)* the beneficiaries were not identified in a systematic manner and the claims of all landless Scheduled Caste persons were not taken into consideration, *(ii)* land was also allotted to ineligible persons, *(iii)* the quality of the land allotted was very poor, uneven and rocky and it was beyond the capacity of the beneficiaries to make such lands cultivable with the limited resources at their command; *(iv)* there were several cases in which the beneficiaries were not even aware as to which particular plots had been allotted in their names: *(v)* either the possession was not made or it was taken back by some powerful landlord or dominant high-caste person; *(vi)* disputes arose between the allottee and some vested interest because the plots had not been properly demarcated, *(vii)* they did not have the necessary agricultural inputs and, therefore, were unable to cultivate the land, *(viii)* most of these allottees had not been given legal documents in respect of land allotted to them, *(xi)* considerable hardships were faced by the Scheduled Castes because the work regarding survey and settlement in respect of their agricultural lands had not been systematically completed. Inadequacy of record of rights stood in the way of obtaining institutional credit by the cultivators

The above findings indicate that the beneficiaries belonging to the Scheduled Castes face problems in cultivating the land allotted to them It would be worthwhile if their problems are sympathetically looked into to make them viable agriculturists In cases where the allotted lands are extremely uneven and beyond the capacity of the beneficiaries to make them culturable, alternate lands should be allotted to them. Possession of the allotted lands also require to be given to the allottees at the places where they face resistance from the vested interests

Liquidation of Rural Indebtedness The findings of the national survey in 1971-72 revealed that rural household ownings up to five acres of land had a debt liability of Rs 1,910 crores was non-institutional, much of it being for consumption purposes Quite an important section of Scheduled Castes was indebted to the village moneylender or the landlord The system of bonded labour was a result of this continued indebtedness

All the states in which the problem of rural indebtedness existed, were reported to have imposed moratorium on recovery of debts from landless labourers, marginal and small farmers and rural artisans Some states like H P., Orissa and U.P., sought to regulate the moneylending business by making compulsory the registration of moneylenders and by fixing the maximum rates of interest that could be charged by them Commercial,

rural and cooperative banks have been geared to provide alternative sources of credit It was believed that if these banks were to promote economic development, marketing support would have to be provided to their areas. These banks were also supposed to meet consumption credit needs to some extent However, there are no statistics to know as to what extent the persons belonging to the Scheduled Castes have benefited in getting rid of their debts It has also been reported that the Scheduled Castes were being denied credit even for their dire needs because moneylenders hesitated in advancing them loans and satisfactory alternative sources of credit had not been provided by the government There should be some inbuilt system to know as to what extent the persons belonging to Scheduled Castes have benefited from the assistance rendered by different financing institutions

Minimum Agricultural Wages Minimum agricultural wages were reported to have been revised in most of the states Steps were taken to strengthen the administrative arrangements for implementation of minimum wages. In most states. staff of the development blocks and revenue department had also been involved, along with the Labour department, in payment of minimum wages Some states have set up separate directorates of agricultural labour and inspectors were appointed in areas where the wages were particularly low.

As regards the machinery of the Central Government for the enforcement of minimum wages for agricultural workers falling within the central sphere, all officers of the Chief Labour Commissioner's Organisation had been notified as Inspectors under Section 19 or as Claims Authorities under Section 20 of the Minimum Wages Act. 1948, for enforcing provisions of the Act, including implementation of Minimum Wages for agricultural workers falling in the central sphere West Bengal and Kerala have been able to enforce and push up minimum wages on account of strong leftist trade unions Higher wages are paid in Haryana and Punjab owing to limited supply and great demand for labour during the agricultural seasons. In other States and Union Territories there is a lot of scope for improving the situation to provide minimum agricultural wages to the Scheduled Castes

Supply of Essential Commodities. The programme of supply of essential agricultural inputs, household consumption items and essential commodities to Scheduled Caste students in their hostels at controlled prices can go a long way in improving their economic condition. The State Social Welfare Departments should conduct studies to find out whether such programmes have proved beneficial or not.

Training for Self-employment. For the engagement of apprentices belonging to Scheduled Castes, a statutory provision was made under the Apprentices Act 1961 and the Apprentices Rules. There is a lot of scope to improve the lower-order skills of Scheduled Caste Youth into higher-order skills so that their potential for employment may increase With proper raw

material, financial, marketing and support in terms of technical guidance and know-how, these youth could be encouraged for taking up self-employment generating small projects Our Industrial Training Institutes and rural-centred workshops can help quite a lot in developing the skills of our youth. KVIC and the Handloom Boards could also help in developing skills and self-employment projects. Proper counselling and guidance services should be developed to support such a training programme with proper linkages. They need to be helped to develop self-confidence and a capcity to be ready to assert their self-hood wherever necessary to safeguard their interests

Reservation of Jobs Scheduled Castes suffer from backwardness They need to be helped out of the handicaps they suffer from. They have, therefore, been given constitutional support in terms of reservation of jobs, concessions/relaxations to have their proper representation in government jobs subject to maintenance of efficiency of administration Besides, reservations and relaxations, the Government has also been giving attention to the training of scheduled caste candidates to facilitate their entry into government services and posts Coaching-cum-guidance centres and pre-examination training centres have been started. Orders regarding reservations in public-sector undertakings were implemented much later than in the case of government services.

Recently, the issue of reservation of jobs and concession in age limit has again come to the fore in Bihar, U P , and some other parts of India. The main argument is that reservation of jobs should be on the basis of poverty and backwardness and not on the basis of caste, otherwise the system of reservations has put the seal of the government on the traditional social segregation of the Scheduled Castes

Reservation of jobs has enabled the Scheduled Castes to move out of the despised and tabooed hereditary occupations, and thus to achieve a measure of vertical mobility. But, at the same time tensions and factions should not be allowed to disturb social peace. In spite of reservations, the social status of the people, who have entered into government jobs, has not improved much. The existing system of guaranteeing certain privileges to the Scheduled Castes as the object of official charity, without any claim to social equality, cannot continue for an indefinite period. Otherwise, it would tend to perpetuate in practice the very system which it tries to abolish in theory (to abolish all forms of social discrimination and yet allow them to continue). Reservation must be a time-bound programme and the reservations should be gradually reduced till everybody can compete and qualify for a job or a seat. But at the same time all possible efforts should be made to better the economic and social condition of the Scheduled Castes

B R. Ambedkar had visualised the constitutional safeguards for the Scheduled Castes on the understanding that after a decade of the guarantee

of certain privileges to them after Independence, a far-reaching social revolution would change the socio-political environment in the country and the Scheduled Castes would get merged in the main stream of the society But it did not happen Rather the gap has widened in many places and in many forms

Improvement of Harijan Basties

The basties or colonies of Scheduled Castes are very unhygienic and lack in many basic amenities in rural areas. This is because their work centres involving unclean occupations are located in these basties Therefore, the conditions of these basties have to be improved by providing sanitary facilities, tap water, electrification, etc. The work of improvement of the basties should be taken up with the help of local bodies The location of unclean occupations should be shifted outside the basties and at a distance so that it may not pollute the environment of the basties

House-sites and Housing Schemes

Under this scheme, cooperative housing societies of Scheduled Castes are given interest-free loans and subsidies to provide house-sites and help in the construction of subsidised houses. Some of the States have taken up schemes for the development of house-sites and for promotion of facilities like free supply of timber, subsidised forest materials, etc Special housing programmes were undertaken in many parts of the country either by establishment of housing corporations or by making special provisions to assist persons belonging to the Scheduled Castes.

At the time of allotment of house-sites, adequate care should be taken to see that the beneficiaries are in genuine need of these and the possession of the sites is also given to the allottees Quite a large number of house-sites allotted in the past have not been put to any use by the allottees, In cases where financial difficulties stand in the way of construction of houses. suitable programmes may be framed to give financial assistance to the allottees. To ensure that the beneficiaries do not desert their sites/houses, employment-oriented schemes may be undertaken by the concerned governments. This has become all the more important in view of great emphasis on providing employment to all within ten years

Conclusions

The programmes for Scheduled Castes in the field of education, economic betterment, employment, social development and eradication of untouchability should continue and be carried out with greater speed and sincerity than today. But these programmes alone, however intensive, cannot solve their problems. Undoudtedly, they can help to some extent in ameliorating their material and economic conditions They cannot effect

their more important *psycho core culture*. To effect this psycho core culture we have to identify the secular institutions and structural features of casteism. We have to organise the Scheduled Castes and devise a social technology for the use of mass sanctions against social stratification.

Gandhiji understood very well that the problem of Scheduled Castes can be attacked on the psychological front more readily and with quicker results than on other fronts. To achieve this, he named them as Harijans and wanted the caste Hindus to play an important role in the upliftment of the Scheduled Castes. Unless their attitudes, values, norms and their behaviour towards the Scheduled Castes change. not much improvement seems practicable Therefore, some programmes should be started for the caste Hindus to bring about such a change of heart. There is need to induct the aspects of better emotional and interpersonal relationships and thereby bring about a change in favour of Scheduled Castes. However, in doing so, the psychological treatment of reassurance which Gandhiji wanted to achieve by totally abolishing untouchability in practice should not be robbed of its centrality. To say that once their economic and social position gets upgraded the contempt and the dehumanised treatment that they get today will by itself disappear is an ingenious device of avoiding the main issue.

It is not only necessary that the Scheduled Castes have to go up the ladder but also what is more important is that the caste Hindus have to come down the ladder to embrace the Scheduled Castes Once this change in attitudes and feelings is initiated, the programmes for the Scheduled Castes will begin to appear more meanigful. There is an urgent need for the growth of a feeling of harmony, forget and forgive and mutual adjustment rather than bitterness and hostility.

The time has come when we have to realise that if the fruits of development and freedom continue to be denied to the Scheduled Castes while prosperity accrues to some, the resulting tensions, social and economic, may not only upset the process of orderly and peaceful changes in the rural economy but even create new problems of law and order

HOUSING THE LANDLESS AND WEAKER SECTIONS

L. S N Murty

Nature and Magnitude of the Problem

In rural areas, ownership of the site on which a person's dwelling stood was not so specific as it was in urban areas. In the zamindari areas, the village habitation site formed part of the whole village itself and was thus settled with the landlord. The ownership vested, therefore, with the intermediaries irrespective of who built the house, whether it was a tenant, an artisan or an agricultural labourer, and he was supposed to do so with the consent of the owner or the joint body of owners He could not acquire ownership rights in this land unless it was specifically transferred to him. This hardly ever occurred. The position of landless labourers was even more precarious in so much as they were more at the mercy of the owner than others It was also customary to have segregated small localities on the outskirts for people belonging to the Scheduled Castes

While the question of land for the landless was always in the forefront of planning and development progammes, that of protecting the rights of landless agricultural labourers in the sites which they had occupied or that of providing them with new sites did not for a long time attract either the attention of the Government or that of Planning bodies

As regards the magnitude of the problem, it was estimated that by the end of 1977, there were about 17 million families of landless agricultural labourers out of which 7 1 million families have been allotted house sites free of cost still leaving about 10 million families without a site[1]. However, no survey has been made so far in regard to the number of homestead dwellers requiring confirmation of homestead rights

Approach of Successive Five-year Plans

The First Five-year Plan had not mentioned anything about the allotment of house-sites to agricultural labourers though it had dealt with rural housing. While emphasising the need to improve rural living standards, the Second Plan proposed taking up of rural housing programmes, community project or NES block-wise, with a suggestion for provision of sites and other assistance to Harijans and other backward classes[2]. Only the Third Plan made pointed reference to the problem of agricultural labourers and Harijans. It suggested that land should be acquired to provide house-sites to these sections of the village population. It was proposed to earmark Rs 5 crores during the Plan period by way of grant under the village housing scheme for assisting states in securing house-sites for landless agricultural workers in villages in which they form a fairly large part of the population [3]

The Fourth Five-year Plan regretted that not withstanding the fact that the village housing scheme was introduced in 1957, it had not made much progress A study of its working supported by some quick field surveys, had shown that the states had generally accorded it a low priority Machinery for proper administration of the scheme did not exist and there was little coordination with the complementary programmes for the improvement of rural areas The Planning Commission advocated the protection of house-sites of families by passing laws conferring proprietary rights in such cases where it had not been so done. For provision of house-sites, it also advocated the utilisation of land which vested in the state as a result of the abolition of intermediary tenure and enforcement of ceiling laws, or which had been earmarked through consolidation of holdings. It suggested special housing schemes for Scheduled Castes and other disadvantageously placed classes by including them in the general village layout for housing. It was also said that measures would have to be adopted to help the weaker sections by putting up decent structures on the sites allotted to them[4] The draft Fifth Five-year Plan provided for the continuation of the scheme introduced during the Fourth Plan from 1972–73 onwards, under the National Programme of Minimum Needs with a provision for Rs. 108 crores for providing nearly four million house-sites during the Plan period[5] Under the revised Minimum-needs Programme, it has been proposed to cover all the families of landless agricultural labour by the end of March, 1988[6]

In the Draft Five-year Plan, 1978–83, Rs. 500 crores has been provided for acquisition of plots and construction of housing It has also been proposed to give assistance at the rate of Rs 500–750 per site for the development of plot, digging of community wells for use by 30 to 40 families, and for laying approach roads The beneficiaries will provide labour inputs. This scheme is expected to benefit about eight million landless labourers[7]

The housing inadequacy was found both in the quantative and qualitative dimensions The housing shortage at the beginning of the Fifth Plan was estimated at 15 6 million housing units out of which 11 8 million were required in the rural areas It was found inadequate qualitatively in terms of water supply, drainage and environmental sanitation It order to improve the housing situation in the rural and urban areas, the Five-year Plan laid down the following objectives[8] (a) Promotion and encouragement of self-help housing, (b) Provision of house-sites and assistance for housing to rural landless labourers; (c) Formulation of public sector housing schemes (d) Augmentation of resources of institutional agencies like HUDCO and State Housing Boards, and (e) Promotion of research in building technology and development of cheap and local building material.

Acquisition of Land and Provision of House-sites

Attention of the Government of India was directed to this problem for the first time in August, 1957 when the Ministry of Housing made the following announcements.

1. Under the village housing project, 100 per cent grant was available to state governments for the acquisition of land and distributing it to landless agricultural workers
2. The state governments had the option of allotting this land either free of cost or at a nominal price.
3. Loans for the construction of new houses or improvement of existing houses to the extent of 80 per cent of the cost of construction, but not exceeding Rs. 3,000 per house or for improvement, as the case may be, were to be granted, and the entire funds were to be placed at the disposal of the state governments by the Government of India.
4. Grants were to be made for laying out lanes, streets and drains for improvement of the environmental conditions of the village where such house-sites were allotted.[9]

As this scheme did not evoke adequate response, a modified (centrally sponsored) scheme was formulated in early 1961 for village housing projects in selected villages This scheme was meant to be put into operation together with other schemes of the programmes for general economic development of villages The aim was to make these schemes the nucleus of inspiration to adjoining areas This scheme was transferred to the state sector from March, 1961 In September, 1962, it was further modified.

An additional scheme was formulated by the Department of Social Welfare, Government of India for the benefit of the Scheduled Castes and Scheduled Tribes The main objective of this scheme was to provide house-sites free of cost to persons engaged in unclean operations such as Sweepers and scavengers[10]

From April, 1967, both schemes were converted into a composite scheme. With effect from April, 1969, its application was restricted to those members of the Scheduled Castes who were working in unclean occupations In accordance with the programme of the Fourth Five-year Plan, the allocation of funds as between the State Government and the Central Government was in the ratio of 40 60[11]

A third revision took place in 1971, when the Ministry of Works and Housing prepared a scheme for the grant of 100 per cent assistance to the state governments for the provision of house-sites to landless agricultural labourers in rural areas. This scheme was considered at the Housing Minister's Conference in November, 1971. After taking into account the

views expressed at the conference, the scheme was revised and finalised as follows

1 The state governments and union territories were to enact legislation conferring homestead rights on landless workers in rural areas in respect of sites on which their houses/huts stood at present.

2 In the case of persons not having sites the land belonging to the state government or gram sabha was to be given free of cost to landless workers

3 House-sites were to be given free of cost to families of landless workers in rural areas who did not already own a house-site or a built-up hut or house on land of their own.

4. The scheme was being introduced as a Central Sector Scheme but was to be implemented by the respective state governments and administrations of union territories.

5 Where land of the state government or gram sabha was not available and where the head of the family or its other member did not own land, agricultural or otherwise, where the family depended for its livelihood mainly on the unskilled labour of its members and where the members of the family resided in the village for the major part of the year, land could be purchased and given to the family of the landless agricultural labourer.

6 The cost of such land was to be met entirely by the Government of India but the cost on staff for implementing the scheme was to be met by the state governments

7. Financial assistance was to be released to state governments in quarterly instalments depending upon the progress of work, the expenditure in the preceding quarter. and the work to be undertaken in the next quarter.

8. No family was to be given a house-site with an area more than 100 sq yards (In this case, the recommendation of the Housing Ministers' Conference was not accepted)

9. The cost of development was not to exceed Rs 150 per site

10. The development was to include clearing and levelling of land and provision of paved streets and storm water drains on the land.

11. A covered masonry well was also to be provided where supply of potable drinking water was not available to serve a cluster of 40 to 50 houses.

12. Landless agricultural labourers belonging to Scheduled Castes and Scheduled Tribes were to be housed along with non-Scheduled Caste and non-Scheduled Tribe landless agricultural labourers

13. The allottee would not have the right to transfer or sell the site
14. Each state had to formulate the project for one community development block at a time and send it to the Ministry of Works and Housing for prior scrutiny and approval.
15. Priority would be given to those blocks in the district which had a sizeable concentration of landless rural workers, particularly of those belonging to the Scheduled Castes and Scheduled Tribes
16. Quarterly reports were to be submitted by the state governments and union territories with regard to progress of work
17. Officers of the Ministry of Works and Housing were to visit the various projects to assess the progress of work[12].

Till the end of April, 1973, a total number of 1,382 projects in 13 states were sanctioned under this scheme, providing 6.53 lakh house-sites to landless workers at an approved cost of Rs. 1,611 89 lakhs [13].

Progress in the Programme Implementation

Notwithstanding some progress in this direction, particularly since 1971, the real breakthrough in implementation came only after the announcement of the 20-Point Economic Programme on July 1, 1975 With a view to stepping up the provision of house-sites, vigorous legislative and administrative measures have been taken. A number of states have amended the Land Acquisition Acts with a view to ensuring more effective and expeditious implementation of the programme.

Among the states, the problem of provision of house-sites does not arise in Manipur, Meghalaya and Nagaland as every household in these states has its own land. The situation is almost the same in Sikkim. Similarly, in the Union Territories of Arunachal Pradesh, Lakshadweep and Mizoram, land belongs to the native community and hence there is no problem. In the rest of the 18 states and six union territories, the estimated total number of families belonging to the weaker sections eligible for allotment of house-sites was 113.02 lakhs, 68.25 lakh families have been provided sites by the end of June, 1976 This shows that house-sites have been allotted to 60.4 per cent of the total number of families in this category. An estimated 44.77 lakhs, or 39.6 per cent of the total were yet to be allotted sites[14]. The progress made by various states and Union territories in the allotment of house-sites till June 30, 1976, is given in the Annexure 1. The states of West Bengal and Rajasthan have completed allotment of house-sites to all the eligible families and the remaining states and union territories are making efforts to reach the targets that have been set

The Union Cabinet, at its meeting held on September 16, 1978, decided to advance the date by two years, *i e.*, from March 31, 1983 to March 31,

1981, for the fulfilment of Plan targets in the priority areas of rural development such as provision of "near-full employment" in community development blocks, drinking water supply, and provision of house-sites to landless labour[15]

Land used for distribution as house-sites is government or panchayat land and wherever such land is not available, private land is acquired on payment of compensation prescribed by the state governments The district collectors and other revenue officers in the district have been delegated necessary powers to expedite land acquisition proceedings Village, block, district and state-level committees comprising officials and elected representatives have been constituted in various states and union territories to supervise the implementation of development programmes including allotment of house-sites

Besides provision of house-sites to the landless and weaker sections, a number of states have taken up house construction programmes for them on a large scale Under the Village Housing Projects Scheme, villagers are provided loans for construction of houses to the extent of 80 per cent of the cost of construction up to a maximum of Rs, 5,000 Till the end of December, 1977, 98,571 houses have been sanctioned out of which 66,053 houses have been completed. Besides this scheme originated by the Central Government, the State Governments have also taken up a number of housing projects on their own [16]

In Assam. the state government has taken up Janata Housing Scheme under which houses are constructed in rural areas for the economically weaker sections. The approximate cost of each house is around Rs 4,000 of which 60 per cent is treated as grant and the remaining 40 per cent as loan to be recovered from the beneficiaries within a period of ten years along with interest @ 5 per cent per annum The monthly instalment of repayment comes to about Rs 17 Under another scheme, the Jayantia Village Housing Scheme meant for the welfare of backward classes, 164 houses have been constructed by the State Housing Board in selected villages at a cost of Rs. 3,000 per house. Each house has a floor area of 231 25 sq. ft with provision for one bedroom, one multipurpose room and a verandah These houses have been given free of charge to people belonging to the Scheduled Castes and the economically weaker sections [17]

In Bihar, the government is constructing houses for Harijans, Adivasis and backward classes In Maharashtra, a pilot programme for construction of huts was undertaken in March, 1975 Under this programme, the government provides a subsidy of Rs. 750 per house costing Rs 1,000 The remaining amount of Rs. 250 has to be contributed either in cash or in kind by the beneficiary [18] In West Bengal, the government has decided to take up construction of huts in all the districts on a crash basis. Beneficiaries,

individually or in groups, have to provide labour and locally available raw material for construction of huts Government assistance is given in the shape of roofing materials only [19] In Madhya Pradesh, roofing material is provided free of cost to the beneficiaries for construction of houses In Tripura, locally available housing material such as wooden posts, bamboo and thatch grass are supplied by the Forest Department at a nominal rate to the allottees

Similarly, People's Housing Scheme in Karnataka and Integrated Housing Scheme in Orissa are the housing programmes in operation for the benefit of weaker sections In Karnataka, a scheme has been formulated to construct houses with locally available material for the rural landless with an area of 250 to 300 sq ft at an estimated cost of Rs 2,500 per house. The beneficiary and his family will contribute Rs. 500 towards labour and the state will contribute Rs 1,000 The balance amount will be treated as loan to be recovered in 20 years. The number of houses reported to have been constructed is 54 775 by the end of June. 1976 [20] Orissa is implementing integrated housing scheme in four districts, viz, Dhenkanal, Mayurbhanj Kalahandi and Koraput where the tribal population is in a majority. By the end of June, 1976, 2854 houses have been completed under this scheme with an expenditure of Rs 26 84 lakhs [21] Kerala had launched on May 14,1972 a plan to construct one lakh houses for the benefit of landless agricultural workers Under the scheme, each person is provided with four cents of land acquired and developed by the state government with central assistance About 55.000 houses were taken up for construction. By the end of October, 1975, more than 40.000 houses were completed. They have already handed over 33,010 houses to the beneficiaries. In addition, 32,887 house-sites were developed and allotted since houses could not be constructed on them by the concerned panchayats Though the scheme was finally wound up on October 2, 1975, houses which were incomplete have been allowed to be completed till March 31. 1976 The government has also taken up a housing scheme for Scheduled Castes and Scheduled Tribes Under this scheme, about 250 houses for Scheduled Castes and 120 houses for Scheduled Tribes have been constructed till the end of June, 1976 [22]

In Tamil Nadu, the government has set up Harijan Housing Development Corporation to take up construction of houses for Harijans The corporation has constructed 6,354 houses and 13 082 were under construction by the end of June, 1976.[23] In Andhra Pradesh, the government proposed to take up housing schemes in rural areas with the assistance of Housing and Urban Development Corporation (HUDCO) and the Life Insurance Corporation (LIC) It has already started a pilot project on rural housing at Shadnagar in Mahboobnagar district.[24]

The Gujarat, Haryana and Punjab governments are giving loans to the allottees of house-sites for construction of houses In Gujarat, an allottee will

get a house costing Rs 1,800 Out of this amount, the bank gives a loan of Rs 1,000 and the government gives Rs. 400 as subsidy The villager makes a voluntary contribution of Rs 250 and also contributes labour worth Rs 150. In Haryana, each house-site allottee is entitled to get a bank loan of Rs 2,000, after he has constructed his house up to plinth level on his own. The Punjab government has sanctioned Rs. 84 14 lakhs to the village-level cooperative house building societies and 1100 such societies have been set up till the end of June, 1978 The allottees of house-sites are advanced bank loans for construction of houses Each allottee gets a loan of Rs 2,100 at the interest rate of 4 per cent per annum and recoverable in a period of 10 years [25]

In the Union Territories of Andaman & Nicobar Islands, Chandigarh, Goa, Diu and Daman, and Pondicherry, financial assistance in the form of loans and subsidies are given to the beneficiaries to construct houses. Local house-building material is also provided free or at a nominal rate

Conferment of Ownership on Occupants of Homesteads

Besides allotment of house-sites to those who have none, there is the question of conferment of ownership rights on occupants of homesteads. In many states, these rights have existed for long and no need was felt earlier for a systematic estimation of those who enjoyed such rights, whose rights were inadequate, and of those who needed such rights. The abolition of zamindari and other intermediary systems brought fundamental changes in the status of homestead tenants but their number was not exactly known

The dwellers of homesteads have been given either ownership or other rights by law. custom, or usage throughout the country and in areas where the zamindari and other intermediary systems in land were prevalent and have been abolished, fundamental changes in the status of homestead tenants have come about In Uttar Pradesh lands upon which homestead dwellers were situated as well as the adjacent areas held by the tenant or his descendant were automatically settled with such holders Consequently, all the homestead tenants virtually acquired the status of ownership But the number of such homestead dwellers was not ascertained In pursuance of the guidelines issued in this regard by the Ministry of Agriculture and Irrigation in June, 1973, the state governments and the union territories administrations took necessary steps for conferment of permanent, hereditary but inalienable ownership rights on homestead dwellers

On the basis of an analysis of the laws and regulations of various State Governments and Union Territories administrations. the rights conferred on homestead tenants can be classified into five categories [26] In the first, which includes Andhra Pradesh, Bihar, Gujarat (Bombay and Saurashtra), Jammu & Kashmir, Maharashtra (Bombay area), Tamil Nadu, Orissa and the

Union Territories of Pondicherry and Dadra and Nagar Haveli, the laws accord to the homestead tenants either full ownership or the status of occupants in the state which is, for all practical purposes, indistinguishable from ownership In the second category come the states of Madhya Pradesh, Haryana, Punjab. Rajasthan and Uttar Pradesh. House-sites in these states are situated mainly on the village *abadi* in respect of which ownership or occupancy status has been given to the dwellers. The states of Karnataka. Kerala and West Bengal as well as the Union Territory of Goa come in the third category, under which considerable security has been given to the tenants. But there is no provision for automatic conferment of ownership or occupancy rights on them However, they are entitled, at their own initiative, to purchase the title of the homestead land in their occupation In the fourth category of areas are the Marathwada and the Vidarbha regions of Maharashtra and the Kutch area of Gujarat The homestead tenants enjoy protection from eviction, but have no title to their homestead land. The law provides them merely the first option to purchase the homestead land, should the landowner ever intend to sell it. In the last category are the states of Assam and Himachal Pradesh, where the tenants do not enjoy the limited right of optional purchase or pre-emption, as enjoyed by their counterparts in the States and the Union Territories mentioned in categories 3 and 4. In the remaining States and Union Territories. homestead land, like agricultural land, is either owned largely by the community or there is no problem of providing security to homestead dwellers.

The States and the Union Territories mentioned in the first category meet, by and large. the requirements of the guidelines prescribed. Those in the second provide a close approximation. But those mentioned in the other categories fall short of them It is, therefore, suggested that legislative measures be taken to confer suitable ownership rights on homestead tenants in all the states and union territories where it has not been done, taking into account the peculiarities of the local agrarian structure.

In the entire country, households of the underprivileged sections of the society and weaker sections which needed protection for house-sites occupied by them have been provided the requisite protection through law. The number of homestead tenants on whom ownership rights have been conferred and of those who are in need of such protection needs to be surveyed

Solving the Housing Problem : Certain Suggestions

The area of 100 sq yards (or 83.6 sq. metres) of each house-site appears to be inadequate. As suggested by the National Commission on Agriculture the nature of subsidiary occupation that the labour family has to pursue should be taken into consideration while making provision for a house-site. In this regard the Commission observed that the earlier fragmented approach

to provide house-sites to the landless labour, or to subsidise the construc tion of houses for sweepers and scavengers, etc has failed to make an visible impact on the living conditions of these sections of the rural commu nity The main reason for this failure, in their opinion, was that "th question of providing a house-site or a house was not approached with view to meeting both the needs of shelter and livelihood".[27]

The Commission also pointed out the failure in the earlier approache "to conceive the need for developing a homogenous living among the rura poor in specially developed *abadis*" and emphasised the need for evolvin "a framework of development providing for both security of shelter an means of livelihood for the weaker sections only " as the emphasis in th past on developing a total integrated rural life of the rural rich and poor to gether has been found not possible due to strong class and caste barrier and the reported encroachments upon the house-sites allotted to the landles by the influential sections Schemes such as the village housing schem introduced in 1957 in 5,000 selected villages which aimed at the genera improvement of villages and assisting the villagers on a selective basis t construct new houses or improve old ones through provision of loans di not help the landless labour or other weaker sections as they "could hardl take the benefit of such assistance owing to their weak economic and socia status"[28]

The Commission stressed the need to provide minimum basic amenitie such as clean drinking water, drainage, sanitation, roads, electricity etc to the weaker sections along with housing They recommended a number of subsidiary occupations for the agricultural labourers particu larly dairying, poultry, vegetable growing, horticulture and fishery, on a priority basis, taking into consideration the availability of land, skill an willingness of the labourers The approach to the whole problem, in the Commissions' opinion, will require integrated action in regard to provision of house-sites to the landless, addition of land to the existing stock through the distribution of surplus land including provision of amenities, parcelling of land into house-sites, construction of houses and sheds for subsidiary occupations with overall development of the area, etc[29] They suggested a time-bound package programme for "providing different services, policy measures, time synchoronisation in implementation, organisation structure and channelling of funds" The Commission recommended the following steps

1 Homestead rights should be conferred on homestead dwellers immediately on a heritable basis and without any payment of rent to the landlord Legislation in this regard should be enacted on a priority basis in the states where such provision does not exist

2 The gram sabha land, panchayat land and undistributed surplus land acquired under ceiling laws which has not yet been put to

any use should be utilised for the proposed programme. The government should pass orders to this effect

3 Each village should work out the requirement of land needed for construction of shelters to live and sheds to work for each household belonging to agricultural labour, Scheduled Castes, Scheduled Tribes and other weaker sections The Commission, in their Interim Report on House-sites for Landless Agricultural Labourers, suggested the following norms for house-sites which could provide reasonable space for shelter as well as for carrying out subsidiary occupations. "(a) in thickly populated semi-urban areas the area of a house-site. may range between 100 sq. yards (83.6 sq m.) to 150 sq yards (125 4 sq m); (b) where relatively more land is available and space can be provided for cattle shed, poultry, piggery or even a village industry unit along with the site for a house, the area may be between 250 sq. yds. (200 sq m) and 300 sq. yds (250 8 m); and (c) where adequate land is available and water could be provided for growing vegetables, the area may be around 500 sq. yds (418 1 sq m)".

4 Land made available from the gaon sabha land or surplus land falling vacant after the imposition of ceiling laws may be consolidated so that a contiguous block of land adjoining the main village is available for the purpose of providing house-sites and the place for subsidiary occupation

5 A redevelopment plan for the consolidated area should be prepared providing for drainage, sanitation, paved streets, community drinking water sources and electricity

6 After the redevelopment plan is ready, the area may be parcelled into suitable house-sites following the norms suggested above

7, Construction or improvement of houses should be organised on a large scale on such sites including shed for subsidiary occupations This programme should be organised on aided-self-help basis. It will facilitate the weaker sections to earn their livelihood also while occupied in the construction work if it is treated as one of the rural works programmes. Bricks will be made available to them free of cost

8 Manufacturing of bricks may be developed as one of the subsidiary occupations for the agricultural labour and other weaker sections. This activity should be integrated with the construction of houses including sheds for subsidiary occupations as a part of rural works programme, in a manner that both the objectives of providing security of shelter and means of livelihood are achieved.

9 It is essential that basic amenities such as clean drinking water, drainage, sanitation, paved streets, electricity, etc. should be simultaneously provided. In this regard, funds provided under the minimum needs programme in the Fifth Plan and those earmarked in the C D. block budgets for providing rural amenities will have to be utilised The agricultural labour and other weaker sections should get priority in the matter of providing such minimum needs. These amenities should be provided on community basis rather than on individual household basis as their provision would involve heavy expenditure.[30]

The cost of house construction has become prohibitive due to the ever increasing prices of building materials Therefore, the use of locally available material, has to be insisted upon in the construction of houses for weaker sections in rural areas to keep the cost at the minimum. In this regard the Central Building Research Institute (CBRI), Roorkee, the Forest Research Institute (FRI), Dehradun and the National Building Organisation (NBO), Delhi are making efforts in evolving low-cost housing technology These organisations have developed techniques for effectively using locally available resources to construct houses thus eliminating or reducing the use of cement, steel and other expensive building material They have developed techniques for the preservation. protection, and fire retardant treatment of thatching material commonly used to roof huts in villages The NBO, through its seven regional rural housing wings located at Bangalore, Vallabh Vidyanagar, Howrah, Chandigarh, Delhi, Srinagar and Jodhpur, is providing technical guidance to the state governments and other organisations in preparing economical designs of houses and in making improved use of local materials. It has evolved a model design for a rural house which would cost less than Rs 1,500 if it is built through self-help using sun-dried bricks, mud-plastering, and thatch roof treated for fire retardation. This design has been given wide publicity The NBO is also implementing through its regional wings a plan scheme for putting up clusters of 10-20 demonstration houses in selected villages along with the implementation of programme for environmental improvement Five clusters of demonstration houses put up by its rural housing wings in the States of Gujarat, Karnataka and West Bengal and the Union Territories of Chandigarh and Delhi during the year 1976-77 made a good impact. In the year 1977-78 also, new schemes for putting up clusters of demonstration houses has been taken up at some more places. The Agricultural Universities at Hissar (Haryana) and Coimbatore (Tamil Nadu) are also making similar efforts.[31]

The Working Group on Housing for the 1978-83 Plan period, in their interim report, recommended provision of a dwelling unit for every family over a period of 20 years. The NBO has estimated the housing shortage in the country at the end of the Fifth Plan at 15.6 million housing units—11.8

million in rural areas and 3 8 million in urban areas. Taking into consideration the requirements of additional households due to growth of population, replacement requirements, and wiping out the existing backlog, a total number of 70 million dwelling units will be needed in rural areas alone over a period of 20 years At this rate, 3.5 million units per year will have to be constructed requiring an investment of Rs 1,400 crores at Rs. 4,000 per unit cost of construction [32] Presently, the state governments are financing the house construction schemes with the assistance of LIC, HUDCO and state housing boards. The commercial banks are playing a limited role in this regard. The Working Group on Housing suggested that they may operate largely through agencies like HUDCO and the housing boards and lend only 30 per cent of their allocation directly Closer association of commercial banks with the housing sector would help solving the housing problem to a considerable extent For this purpose, adoption of villages by the commercial banks has been suggested. A proposition worked out by M L Pastore states that if each rural office of a commercial bank adopts five villages 25 houses can be built every year at a cost of Rs 50,000 @ Rs 2,000 per unit cost of construction. All the rural bank offices together can construct 6,00,000 houses every year with a total investment of Rs. 120 crores The operation of such a scheme would also generate employment opportunities. Pastore calculated that any house building project with an estimated cost of Rs one million will create employment opportunities for 1,92,000 man-years In other words, 1.92,000 persons will get employment every year It will also provide subsidiary occupations for rural people in the preparation of bricks, tiles, etc which will be required on a large scale [33] This proposition deserves careful consideration

State-wise cooperative housing federations for weaker sections can play a useful role in channeling financial assistance, obtained from the LIC and other agencies, to the members of housing cooperatives. The allottees of house-sites may be provided necessary guidance and help to form cooperative housing societies In this regard, the procedure adopted by the Tamil Nadu government is working of consideration by the other states In Tamil Nadu the housing schemes in villages are now implemented through the rural cooperative housing societies after the discontinuation of the village housing scheme in April, 1978. In 1977-1978, 50 divisional-level rural housing societies, at the rate of one per revenue division, have been formed covering all villages in the state. Members owning house-sites to the extent of at least 2 cents will be issued a loan of Rs 5,000 each for construction of house. Harijan members are given this loan interest free and non-harijan members belonging to economically weaker sections are charged an interest rate of 9¼% per annum. Twenty-five per cent of the membership in these societies is reserved for Harijans. The state

government has provided free of cost the services of a senior cooperative inspector for each divisional society and 11 cooperative sub-registrars exclusively to look after the work of rural housing societies The Tamil Nadu Cooperative Housing Society has sanctioned 3,153 applications for Rs, 173 48 lakhs during the year 1978–79

The need for setting up a central organisation like a National Building Materials Development Corporation to organise a pool of locally available building materials at convenient points (preferably in C.D. Blocks) was emphasised at the State Housing Minister's Conference held in 1976. Such an organisation would help further to reduce the cost of house construction in terms of charges of transporting the material from longer distances, and also save considerable time by enabling the villagers to pick up all the necessary materials from one place.

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ANNEXURE

Progress Made in the Provision of House-sites to Landless and Weaker Sections

(Data up to Col 6 Furnished by the Ministry of Works & Housing in July, 1976; List Rearranged in Order of Population)

S. No.	State/Union Territories	Total No of Eligible Families in the State/ Union Territory	No of Families allotted House-sites (incld. undeveloped sites)	No. of House-sites out of Col 4 developed	No. of Eligible Families Still to be Allotted House-sites	Proposed Fifth Five-year Plan Outlay for 1977–79 (Rs in lakhs as given in Annex 22 of the Plan)
1	2	3	4	5	6	7
1.	Uttar Pradesh	12,12,014@	12,01,996	15,294	10,018	240
2.	Bihar	19,58,000@@	7,15,000	12,178	12,43,000	200
3	Maharashtra	3,61,183@	3,58,000	43,658	3,183	130
4.	West Bengal	3,01,941@	3,01,941	6,500	—	195
5.	Andhra Pradesh	16,00,000@	6,57,000	652	9,43,000	210
6.	Madhya Pradesh	9,13,037@	7,67,134	7,704	1,45,903	200
7.	Tamil Nadu	14,97,000@@	5,23,076	38,950	9,73,924	120
8.	Karnataka	7,26,000@	5,50,000	1,25,554	1,76,000	200
9	Gujarat	2,81,000@	2,68,000	40,928	13,000	140
10	Rajasthan	8,16,000@	8,16,000	3,000	—	8
11	Orissa	5,00,000@	17,642	4,000	4,82,358	75
12	Kerala	3,00,000@	79,000*	79,000*	2,21,000	340
13	Assam	2,29,000@	49,056	N A	1,79,944	52
14	Punjab	3,11,630@	3,03,770	6,545	7,860	75
15.	Haryana	1,96,022@	1,69,684	600	26,338	28
16	Jammu & Kashmir	18,000@@	1,733	—	16,267	25
17	Himachal Pradesh	4,457@	4,411	2,314	46	—

Annexure — (*Contd*)

1	2	3	4	5	6	7
18	Tripura	42,650@	20,915	2,083	21,735	12
19	Manipur	Not applicable In Manipur, Meghalaya and Nagaland every household has its own land The situation in Sikkim is almost the same				—
20	Meghalaya					—
21	Nagaland					—
22	Sikkim					3
	Total	1,12,67,934	68,04,358	3,88,960	44,63,576	2,353
	Union Territories					
1.	Delhi	14,000	12,228	N A	1,772	20
2	Goa, Daman & Diu	N.A	689	N A	—	12
3	Pondicherry	15,779	6,322	N A	9,457	24
4.	Arunachal Pradesh †	—	—	—	—	—
5	Chandigarh	52	50	N.A	2	2
6-	Mizoram †	—	—	—	—	—
7	Andaman & Nicobar Islands	3,816	1,078	N A	2,738	—
8	Dadra & Nagar Haveli	N A	592	N A	—	—
9	Lakshadweep †	—	—	—	—	—
	Total	33,647	20,959	N A	13,969	56
	Grand Total	1,13,01,581	68,25,317	3,88,960	44,77,545	2,406

Notes .

† In Arunachal Pradesh, Mizoram and Lakshadweep every household has its own land.

* Previously, in Kerala house-sites as such were not being allotted. Only after the houses were constructed, the houses were being handedover to the beneficiaries The State Govt wound up the scheme for construction of houses on the house-sites on 2 10-75 and is now distributing house-sites The State Govt had acquired land for 89,640 house-sites out of which about 33,000 hose-sites were developed and allotted to the beneficiaries under the scheme, about 46,000 houses were constructed on the sites acquired for this scheme and another about 10,000 sites are in the process of allotment by the State Govt

@ According to the estimates made by the State Government.

@@ Accroding to the information received from the Planning Commission with their D O letter No PC (P)/1/5/2/MNP/72, dated the 31st September, 1972

RURAL WATER SUPPLY

S Balakrishna

Among the components of the Minimum-needs Programme, Rural Water Supply is next only in importance to elementary education and rural roads Of a total allocation of Rs 4,180 crores for the Minimum-needs Programme during the Sixth Plan (1978–83), an amount of Rs 675 crores (16 1 per cent) has been allotted to rural water supply The corresponding allocations for elementary education and rural roads are 22 per cent and 19 per cent, respectively

The relative share of the allocation for rural water supply in the total plan outlay during the Sixth Plan is, however, very low and of the order of 0 97 per cent only. During the earlier Five-year Plans (1951–78) a total amount of Rs 622 crores was allotted to rural water supply and this also formed an insignificant proportion (0 93 per cent) of the total plan expenditure during this period It must however be noted that while in the Fourth and Fifth Plan about 1 2 per cent of the total plan expenditure was spent for rural water supply, this has been brought down to 97 per cent in the current plan period

The schemes relating to rural water supply under implementation so far are the National Water Supply Sanitation Scheme (1954) and the Accelerated Rural Water Supply Scheme (1972–73) Prior to the Fourth Plan rural water supply programmes were taken up through programmes relating to community development, local development works and welfare of backward classes These were supplemented by National Water Supply Sanitation Scheme of the health Ministry The measures introduced were simple ones, like wells, and hand pumps in the former case In the case of the health Ministry scheme it was attempted to provide water to groups of villages and this required personnel with technical skill for tapping of water. Public Health Engineering divisions were set up in the Fourth Plan period.

According to a survey carried out in 1972–73, of the 576,000 villages in the country, 153,000 villages were identified as 'problem' villages (26 6 per cent) Problem villages are those which do not have safe water supply for one or more of the following reasons: *(a)* the source of water for the village is at a distance of more than 1.6 km or at a depth greater than 15 metres , *(b)* villages whose source of water supply is endemic to water-borne diseases like Cholera, guinea-worms, *(c)* villages in which the source of water supply contains excessive chloride (saline) or iron or fluoride.

A break-up of the 'problem' villages according to the above three categories is as follows.

Category	*No. of villages*	*Percentage*
(a)	91,000	59.5
(b)	37,000	24 2
(c)	25.000	16 3
	153,000	100 0

So far, only sixty-four thousand villages in the country have been provided safe water supply and these account for 10 per cent of the total rural population. Of these, 40.000 belong to the 'problem' village category leaving a residual of 113,000 villages In the case of non-problem villages the coverage was 24,000 leaving a backlog of 399,000 villages Of these 399,000 villages having unprotected water supply, the supply was adequate in 214,000 villages (53 6 per cent) while it was inadequate in the rest (185,000 villages). During the Sixth Plan, it is proposed to provide protected water to these 185,000 villages presently having inadequate water supply

On account of the continuous drought in the years subsequent to 1972–73 and consequent lowering of water table or drying up of sources, the states made out a plea for upward revision of the number of 'problem' villages As of 1st April, 1978, according to the revised figures given by the states, the backlog of 'problem' villages to be still cleared is estimated at 1.45 lakhs of villages.

The cost of providing water per village varies in a wide range from Rs 5 200 in West Bengal to Rs 7 85 lakhs in Mizoram

A Working Group on water supply and sanitation was set up in 1977. The interim report submitted towards the end of that year emphasised the need to make a realistic appraisal of future requirements as well as the need to up-date the information with regard to the number of villages not covered so far. The Working Group has also drawn attention to some of the existing drawbacks like application of inappropriate technology and sophisticated equipment, failure to examine all alternatives and select the one which is the most cost effective, absence of a viable financial policy, insufficient attention to manpower development, lack of consultation with and consequent non-involvement of the communities concerned, inappropriate institutional arrangement and poor management The expenditure incurred so far on national water supply has been meagre compared with the overall requirements.

Attention was also drawn to the lack of uniformity in the setting up of Technical and Administrative Departments connected with rural water supplies in the State. This aspect had posed some difficulty in planning the programme from the Centre On the technical side, it was seen that the Chief Engineers of the Panchayati Raj Departments were responsible for rural

water supplies in some states, while in others Chief Engineers (Water Boards) were incharge of the programme. On the administrative side, Secretaries dealing with the Panchayati Raj Departments, Health and Family Planning Departments, Irrigation and Power. Departments, and Urban Development Departments were responsible for rural water supply programmes in different states. The need to evolve uniform policies in respect of planning, management and maintenance of rural water supply schemes was, therefore, emphasised

Using the secondary data available at the state capital a small study was carried out on the progress of the rural water supply schemes in A.P. The object was to assess the extent of variation among the districts in the progressive coverage of villages,

It was found that the progressive coverage of villages, at the end of March, 1977 exceeded 90 per cent in 8 districts of A P. (Cuddapah, Anantapur, Nalgonda, Mahboobnagar, Nellore, Guntur, Kurnool, and Hyderabad). The backlog has almost been cleared in Nalgonda district.

East Godavari and Srikakulam districts were found to be lagging very much behind other districts In the case of West Godavari although the progressive coverage was not low, the clearance of backlog was found to be proceeding slowly. Besides these three districts, the clearance of backlog was below the state average in 5 other districts (Krishna, Khammam, Chittoor, Nizamabad and Adilabad). It was felt that the Minimum-needs Porgramme funds should be earmarked for these 8 districts instead of being spent over the entire state

It may be mentioned here that in Andhra Pradesh, rural water supply schemes are sanctioned under various programmes such as (1) Normal Plan Programmes, (2) LIC loan Assistance Scheme, (3) 6-Point formula programme, and (4) Rayalaseema Development Programme. Under the various schemes, works are taken up under three categories (a) borewells, (b) protected water supply schemes, and (c) simple wells. Comprehensive protected water supply schemes are also under execution in regions where availability of water is the main problem. These involved drawing of raw water from the canals, filterisation and pumping to the surface reservoirs.

As per the revised method of financing the water supply scheme introduced in 1971, certain portion of the cost of the scheme is provided as a grant to the Panchayats. This proportion varies from 25 per cent in the case of Panchayats within an income of more than Rs 1 lakh to 87 per cent in the case of Panchayats with income below Rs 4,000

It is the responsibility of the Panchayats to maintain the various rural water supply schemes in A.P. It was found that, by and large, the position regarding the maintenance is not satisfactory, particularly in the case of borewells with hand pumps The reasons for the poor performance are

inadequate financial resources to meet the expenditure on repairs, lack of technical knowhow to identify problems and the nature of repairs involved. lack of ready supply of the required parts for replacement, lack of ready availability of skilled workers to attend to the job and the remoteness of several of these villages

PROGRAMMES FOR WOMEN, YOUTH AND CHILDREN

S. P. Jain

Of the total country's population of 548 million (according to 1971 census) 284 million were males and 264 million females Further, about 81 per cent of the total population was rural consisting of 52 per cent males and 48 per cent females, and about 109 million (24 per cent) of the total rural population belong to the youth in the age-group of 15–29 years. As much as 72 per cent of the manpower in rural areas, therefore, comprises women and youth Naturally, such a vast potential of human resources requires special attention to make the process of development meaningful and substantive Another section of the population which is equally important from the point of view of the future growth of the country is that of children This group deserves attention from the point of view of prospective citizens and as active partners in development.

Due importance was attached to enlist people's participation in various programmes of rural development. This was sought to be achieved through several institutions and agencies, such as panchayati raj bodies, cooperatives, voluntary organisations and associate organisations such as Youth Associations (Yuvak Mandals) and Women's Associations (Mahila Mandals.)

Position of Women

Women constitute about 19 per cent of the total rural working force and a substantial part of labour in subsidiary occupations and key labour in agricultural operations In the country as a whole, nearly 89 per cent of female workers in rural areas are dependent on primary sector—agriculture, livestock, forestry, etc According to an estimate, about 3.8 million rural women were totally unemployed and 17.6 million actually under-employed (1975). In general, the wages are found to be lower than those for men in the unorganised sector. The rate of literacy among rural women is only 13 2 per cent as against 42.31 per cent in urban sector.

Until recently, women's role in and contribution to rural economy did not receive adequate recognition This was probably because of the middle class bias in development planning and administration and also because of their meagre representation in decision-making process*

There is now an icreasing realisation of the fact that the process of development will be incomplete without the active involvement of women.

*Indian Council for Social Science Research, *Role of Rural Women in Development* (Report of an International Seminar), Allied, Bombay, 1978.

Accordingly, various measures have been adopted to motivate women to participate both in economic and social welfare programmes

The Programmes

The major programme for the development of women in rurul India was firstly conceived at the time of introduction of community development programme in 1952 It made a modest beginning when the rural women were encouraged to form women's clubs which came to be known as *Mahila Mandals* in most of the states The objectives of these associations limited to discussion of socio-economic problems and participation in some of the programmes related to home chores. In some blocks, these organisations were also involved in the implementation of Applied Nutrition Programme and Composite Programme for Women and Pre-school Children. It was expected that the Mahila Mandals would be able to motivate rural women not only in improving their skills in home-crafts but also participating in socio-cultural activities of their villages in addition to participating in supportive productive programmes such as compost-making, dairying and animal husbandry, sanitation, and hygiene

Though from the very beginning the emphasis has been on activities which are associated with home duties of women, the potential of the Mahila Mandals was also sought to be utilized for some selected development and social welfare programmes These included the Applied Nutrition Programme (ANP), the Integrated Child Development Services (ICDS), and Composite Programme for women and pre-school children They were also encouraged to take up production-oriented activities, *viz.*, kitchen gardening, poultry, fishery besides being involved in feeding demonstrations, propagation of family welfare and non-formal education programme

In addition, the Mahila Mandals have also been involved in programmes such as land reforms, agricultural development, cooperatives and welfare and extension which were intended to help improving directly or indirectly the socio-economic lot of the rural women

Eversince their establishment, the Mahila Mandals programme has been under review from time to time by the policymakers. It has also received due attention in some of the Five-year Plan documents besides being reviewed at the highest level from time to time For instance, the Development Commissioner's Conference held at Simla in 1955 recommended initiation of a few pilot projects for intensive work among women and children and also taking up a minimum programme of social education. In the subsequent Conference held at Nainital in 1956, it was recommended that the women programmes should be comprehensive enough to include social welfare, home economics and extension The Conference held at New Delhi in 1964 wanted the effective use of Mahila Mandals in promotion of production programmes and also activities such as mid-day meal s

in schools, development and management of schools and community gardens and fishery units. The Conference held at Srinagar in 1965 felt that encouragement should be given to economic projects which could sustain group interest

In the Fourth Five-year Plan, two schemes, namely, 'Incentive Awards to Mahila Mandals' and 'Training of Associate Women Workers' were introduced* Under the former, the Mandals showing good performance over an year were awarded cash prizes for undertaking economic projects or activities The latter was designed to provide orientation to selected women having leadership qualities in organising village women and assist them in implementing various welfare programmes. In the Fifth Five-year Plan, another scheme, 'Promotion of Voluntary Action' was initiated. The objective of this scheme was to utilize the potential of these organisations in the implementation of various programmes meant for women and children

The existing programmes of the Department of Rural Development consist of the following three schemes·

1 *Scheme for the Training of Associate Women Workers* It is intended to promote leadership among rural women so that they may be able to organise themselves for undertaking development programmes.

2 *Scheme for Promotion and Strengthening of Mahila Mandals.* It aims at strengthening of the existing Mahila Mandals by providing them necessary financial assistance

3. *Scheme for Incentive Awards.* The Mahila Mandals, under this scheme, are given awards for good performance over a year. The award may be utilized by them for undertaking economic activities

In accordance with the policy laid down by the government from time to time, a number of Mahila Mandals have been organised in different States. By now, as many as 61,400 mandals with an estimated membership of 17.2 lakhs have been established The average number of mandals per Block is 13 with a membership of 382

A review of the available literature clearly shows that the performance of Mahila Mandals has been far from being satisfactory. These organisations have not yet been recognised as an integral part of the total rural development effort The main reasons for their poor performance have been identified as inadequacy of staff, vagueness in the objectives, lack of financial support, lack of participation of all sections of society and, above

*These are components of a larger scheme "Composite Programme for Women and Children" which has since been abandoned.

all, an appropriate policy-approach The emphasis has been mostly on social and cultural programmes and very little economic content has so far been given Although some of the studies were not directly carried out in respect of Mahila Mandals, they nevertheless were indicate the extent to which these organisations were involved in different programmes A study of the working of Mahila Mandals conducted at the NIRD revealed, among other things *(i)* the participation of the women members from the weaker sections was meagre both in the decision-making process and the general activities, *(ii)* they have not been able to free themselves from the dominance of high caste or class people in the village, *(iii)* most of the Mandals did not have adequate financial resources to undertake any kind of activity, and *(iv)* there was more emphasis on home-craft activities as compared with economic activities particularly those intended for the benefit of the poorer sections

Programmes for the Rural Youth

According to 1971 census, the total rural population of the country is 439 1 millions (80 1 per cent) of which nearly 109 millions (24 per cent) belong to the age-group of 15–29 years A vast potential of youth power in rural areas is thus available for harnessing in the cause of rural development

Because of their being an integral part of the rural environment and intimately awareness of the local problems, the rural youth can be more adaptive and innovative for bringing about socio-eoonomic changes in the villages which is the primary concern of the present rural development policy. Since the rural youth, by tradition, are accustomed to living and sharing their routine affairs with the local people in more than one way, they can take upon the task of community welfare with more dedication than the outsiders As the rural youth has very strong loyalty to local customs and culture they can think of developing their own areas more seriously than anyone else.

The Yuvak Mandals

The cooperation and participation of the rural youth in community development programme was sought by organising youth associations In the early stages of the programme. the activities of Yuvak Mandals were mainly confined to discussions and social get-togethers In course of time, efforts were made to utilize their potential in various development programmes. Accordingly, Yuvak Mandals were formed with a view to inculcating among the rural youth the habit of thinking and acting together for their own betterment and ultimately for the benefit of the community. In the beginning, attempt was also made to utilize these organisations for implementation of some selected programmes of community development.

A Yuvak Mandal is a local unit of boys and girls actively engaged in learning some improved practices in agriculture, animal husbandry, community services and rural cottage industries Any youth, male or female, literate or illiterate, between the age-group of 15–30 years is eligible for its membership The members of a Yuvak Mandal elect their office-bearers, plan and conduct their own programmes, hold regular meetings and take part in community improvement They undertake activities like poultry keeping, pisciculture, piggery, sheep rearing, goat rearing, cattle rearing, bee keeping, sericulture, vegetable and fruit growing, tree planting, compost making, maintenance/repair of farm machinery, village industries, spinning, tailoring, embroidery and fruit preservation. In addition to these economic projects, these organisations also participate in special projects for socio-cultural development

The programmes of these organisations were mostly chosen according to local needs and potentiality on the one hand and capabilities and interests of the youths on the other. The state governments launched youth programmes after the commencement of Community Development Programme. The nature of activities undertaken and the extent of their collaboration with the extension service varied from state to state Some of the activities undertaken by the Yuvak Mandals are as follows :

i) Programmes connected with agriculture such as utilisation of new agricultural technology and animal husbandry including calf-rearing, kitchen-gardening, poultry-keeping, pest-control, etc.

ii) Economic activities such as spinning, tailoring, embroidery, food preservation, and projects of self-employment.

iii) Community services such as village sanitation, social service, construction and repairs of roads, culverts, schools, panchayat ghars, community centres, etc.

iv) General, recreational and cultural activities such as organising folk songs dramas, sports, running of libraries and reading rooms, bhajan-mandals.

Five-year Plans and Yuvak Mandals

Under different Five-year Plans, the Yuvak Mandals were sought to be utilized for purposes of overall rural development In the Second and Third Five-year Plans, for example, peoples' participation was also sought through the *Lok Karya Kshetras* run by voluntary agencies. In the Fifth Five-year Plan, a scheme of voluntary action was envisaged which was intended to harness the potential of youth energy in developmental work. In order to achieve this end, the following steps have been taken.

i) Helping the Youth Clubs to have simple constitution in the local language on the basis of the model bye laws prepared by the Department of Rural Development.

ii) Simplifying the procedure of registration to enable the Youth Clubs to get themselves registered under the Societies Registration Act, 1860

iii) Giving them recurring and non-recurring administrative grants during the Fifth Five-year Plan

iv) Arranging short orientation for their office-bearers on the organisational aspects of Youth Clubs

v) Organising block/district-level federations of the Yuvak Mandals.

According to the Plan proposal, Yuvak Mandals are to be promoted/strengthened in 500 C D blocks at five Mandals per block So far 90,000 Yuvak Mandals with a total membership of 19.5 lakhs have been established in the country.

Efforts of the State Governments

In addition to the national programmes of welfare of the youth, some of the state governments have taken initiative for organising Directorates of Youth Welfare in the Departments of Eductation, Social Welfare or Rural Development. The Uttar Pradesh Government, for instance, has established a network of youth organisations from village to state levels under the title 'Prantiya Vikas Dal' (Provincial Develpoment Force) This organisation consists of volunteers and full-time paid government employees involved in youth welfare and development activities The Government of Tamil Nadu has oragnised not only a Division of Youth Welfare in Rural Development Department, but also Prosperity Brigade which utilises young volunteers for developmental and social welfare programmes Gujarat, Karnataka, Punjab have established Directorates of Youth Welfare In other states, the Directorates of Education undertake this work

It has been observed that these youth organisations have succeeded in fostering a healthy spirit of cooperation and team-work among the rural people and have made them conscious of their responsibilities as citizens They have also provided a good training ground for leadership roles and functions in other village-level organisations such as Panchayats and Cooperatives besides facilitating 'social acceptance' of various developmental programmes

As the economic development in the country, by and large, depends on the development of agricultural sector and provision of employment to the unemployed or under-employed, the role of the youth in rural development will have to be analysed in terms of the programmes of agriculture and allied activities Although a number of development programmes such as education, nutrition, health, adult education, family and social welfare have been initiated, the effort to improve the quality of middle segment of population, namely, youth who form a major labour force in agriculture has been

insignificant. Further, as a large majority of the youth population today are prospective cultivators, future development of agriculture would essentially depend on their abilities and skills which they are likely to develop as a result of the present programmes

So far the emphasis seems to have been more on socio-cultural and allied activities. As a result, the involvement of youth in agricultural production and gainful economic activities has not been adequately appreciated. It has now been realised that the activities of youth organisations need to be given economic thrust so that their potential may be appropriately integrated with the overall task of socio-economic development in addition to enlisting community participation. Further, these organisations have to be considered as instruments both for social and economic change in rural areas Some of the practical ways in which these organisations can assist in agricultural development are as follows

1. Transfer of new agricultural technology to the farmers.
2. Demonstration of agricultural practices
3. Crop protection.
4. Use of improved implements
5. Vegetable gardening and hourticulture
6. Production of manures.
7. Soil conservation and water management.
8 Poultry development and allied activities.
9. Social education.
10. Employment.
11. Health and sanitation
12. Social welfare
13 Home/cottage industries.

In addition to various programmes which have already been discussed earlier, the youth can also be involved in programmes such as land consolidation, land development, afforestation, soil conservation, minor irrigation works, roads and buildings, etc.

The overall working of the Yuvak Mandals so far has not been uniform and on the desired lines In some parts of the country, these organisations have done very useful work, while in others their performance is far from being satisfactory In a study conducted recently at the NIRD, it was found that the general thrust of the Yuvak Mandal's activities was on socio-cultural programmes and very little attention had been paid to economic programmes These organisations had not enlisted adequate participation of the weaker sections of the communities. They suffered

from a number of problems such as lack of regular financial resources, lack of enthusiasm among the members and guidance from the elders of the village Notwithstanding these problems, it was evident, these organisations, if provided proper supervision and guidance, can be active partners in rural development programmes

Programmes for Children

In view of the important place accorded to the welfare of children in the scheme of national development, the Government of India adopted a National Policy on Children on August 22, 1974, outlining a 15-point programme. The highest priority has been accorded to child health and nutrition, welfare of destitute children, creches for children of poor working and ailing mothers and care of handicapped children In accordance with this national objective, the following programmes have been undertaken for the welfare of children.

1. *Integrated Child Development Services.* There has been an increasing awareness of the importance of organising early childhood services as an investment in the future economic and social progress of the country. However, sectoral approaches to the needs of children had prevented the development of a coordinated strategy The foundations for physical, psychological and social development can be effectively laid in early childhood if an appropriate range of services can be provided in an integrated manner. The concept of providing an integrated package of services is based on the consideration that the overall impact will be much larger if the different services develop in an integrated manner as the efficiency of a particular service depends upon the support it receives from other related services

The ICDS is aimed at the delivery of a package of services to preschool children and pregnant and nursing mothers in order to ensure full opportunities for the all-round development of children These services include supplementary nutrition, immunisation health check-up, referral services, nutrition and health education and non-formal pre-school education. These services are to be further strengthened by convergence of other supporting programmes like rural water supply and applied nutrition *(i)* to improve the nutritional and health status of children in the age-group of 0 – 6 years, *(ii)* to lay the foundation for proper psychological, physical and social development of the child; *(iii)* to reduce the incidence of mortality, morbidity, malnutrition and school drop-out; *(iv)* to achieve effective coordination of policy and implementation amongst the various departments to promote child development, and *(v)* to enhance the capability of the mother to look after the normal health and nutritional needs of the child through proper nutrition and health education

The performance of the ICDS has so far been quite encouraging At present, supplementary nutrition is being provided in 29 out of 33 projects

covering 2.3 lakh beneficiaries More than 97,000 children are availing of non-formal pre-school education through 3,022 Anganwadi Centres. The average attendance has been found to be around 32 per cent About 2,649 functional literacy classes are being conducted in 32 projects for more than 41,000 adult women.

2 *Balwadi Nutrition Programme* Various nutrition and diet surveys carried out during the last two decades have revealed a high incidence of protein-calorie malnutrition and iron-folate and Vitamin-A deficiency among pre-school children, pregnant women and nursing mothers, particularly in urban slums and tribal areas During the year 1970-71, the Balwadi Nutrition Programme for children in the age-group of 3-5 years and day-care centres and the special nutrition programme for children in the age group of 0-3 years, pregnant women and nursing mothers in urban slums and tribal areas were started with a view to providing supplementary nutrition to the vulnerable sections of the population By the end of the Fourth Plan, the Balwadi Nutrition Programme covered only 2 29 lakh children

3 *Special Nutrition Programme.* The special nutrition programme, started in 1970-71 to provide supplementary nutrition to children in the age-group of 0-3 years and pregnant and nursing mothers in urban slums and tribal areas was subsequently extended to cover children up to the age of 6 years. The programme covered 37 lakh beneficiaries at the end of Fourth Plan.

4. *Creches for Working and Ailing Women's Children.* Financial assistance is given to voluntary organisations for running creches for the children (0-5 years) of working and ailing women whose monthly income did not exceed Rs. 300 The scheme, started in February, 1975, has gained momentum during the year 1975-76 During the year 1974-75, grants amounting to Rs 5 93 lakhs were released to 10 voluntary organisations for establishing 247 creches for about 6,000 children. During the year 1975-76, Rs 28 36 lakhs have been sanctioned to 41 voluntary organisations as grants for establishing 508 creches for about 12,700 children

5 *Balsevika Training Programme.* The Balsevika Training Programme was started during 1961-62 to meet the requirements of trained personnel for the institutions implementing welfare programmes for pre-school children At present, 27 Balsevikas Training Institutes are run in different states through the State branches of Indian Council for Child Welfare which is responsible for the implementation of the programme The training course of Balsevikas has a duration of 11 months and includes training in pre-school education, recreation, health, nutrition and social work

Provision of Basic Services

While the results of the above programmes will be watched keenly, it is meanwhile necessary to expand the basic services for all children, if they are

to grow up to lead decent, happy. healthy and productive lives. The performance of the men and women destined to carry out the tasks of economic and social development in India depends on the care they receive as children of today. Unfortunately, a majority of the citizens of tomorrow at present are being denied the opportunity to develop their full potential. Unless they receive the basic services they need, the country will suffer the consequences of a tragic wastage of human resources The basic services can be summerised as follows

(a) Health care (primary health care for mothers, infants and children, health education and disease control);

(b) Clean water supply (safe water for drinking, cooking and bathing to prevent the spread of diseases caused by lack of sanitation),

(c) Nutrition (meaning enough of the right kind of food to prevent malnutrition and to aid physical and mental growth),

(d) Education (elementary schooling and out-of-school learning to rescue children from illiteracy and ignorance),

(e) Training (to provide health workers, school teachers, social workers nutritionists, and others needed for development tasks); and

(f) Welfare services (day-care centres, youth and women's groups, and self-help projects to improve family and community life).

ADULT EDUCATION

B. C. Muthayya

The initiative for change and development rests with the people They should be helped to discover their own potential to initiate development themselves with little outside assistance. As long as illiteracy continues to be the major problem among the rural people, any attempt to bring about rural development—economic and social, would not meet with the desired results Adult Education hopes to remedy the educational deprivation of adult population in order to develop their full potentiality and make the development process self-reliant and self-generating in regard to opportunities and initiative

It has become a perennial problem for programmers, concerned with introduction of innovations, either in the field of agriculture (in terms of new methods of cultivation, improved seeds, chemical fertilizers, and the like), family planning (in terms of making people accept the programme) or in bringing about people's participation in development programmes through the panchayati raj to look askance at the behaviour of the people as most of them maintain an indifferent attitude to the programmes. The question, therefore, arises why people are resistant to accepting programmes as long as they are good in terms of contributing to the improvement of the level of their living What are the obstacles for their adoption of innovations? Even in attempts to collect the loans due from people, it has become difficult to make them repay What is preventing people to realise their sense of duty towards the society in which they live? The voluntariness of the people to involve themselves in the total process of development of the society is wanting and to that extent, social change becomes impossible One perhaps finds security in the continuation of the age-old traditions regardless of their utility or relevance to the present-day situation and, therefore, resist any social processes which would affect their continuity and status quo The existing social structure of the society based on ascribed than achieved factors serves as a deterrent for innovation It would thus seem whether the social change is possible at all as long as the ordering in the social structure is dependent upon the ascribed factors like caste or class or certain personal resources One way of bringing about social change is to depend upon human potential as it is believed that the environmental opportunities have not brought out the full utilisation of the human potential, particularly because of a large section of people who experience a sense of deprivation — socially, culturally, intellectually and economically In case the human

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resources are to be utilised to bringabout social change then, it is required to build up the human potential from what it is at the present moment of time in the majority of the people Various studies have revealed that a certain level of education contributes to one's level of living, participation in social organisations, occupying leadership positions, maintaining favourable social attitudes and adopting modern agricultural practices Therefore, the strategy for improving the literacy level of the people should be basically oriented towards improvement in one's economic status through one's concerned occupation which, among the rural people, is mostly agriculture.

By and large, the attempt should be to improve the potential of the individual to interact with his environment in order to make the best use of the available opportunities as related to his occupation and also help him to develop skills in building up relationships with other wherever the nature of work involves such cooperative effort or interdependency.

In October 1978, realising the need for educating the rural adults, the country has launched a massive programme of adult education Most of our programmes of adult education during the last 30 years, while emphasising on literacy as the focal point revealed the fact that to most of the illiterate people, the basic human rights and access to the common amenities of life were more crucial than literacy. Our accumulated experience of the past experiments in adult education leads us to construct a meaningful and suitable programme to fulfil the basic felt-needs and aspirations of rural people The National Adult Education Programme lays great emphasis on the education of men and women and their upliftment It stresses the need for imparting reading and writing skills to those who belong to the economically and socially deprived sections of society so as to help them to become self-reliant, improve their own lives and form their own organisation. This fact makes National Adult Education Programme different from all other adult education programmes undertaken so far. Before we go into the actual concept and other aspects of adult education, it is better to take the stock of the existing level of literacy and the method of identifying the target groups as envisaged in the programme

Position of Literacy

According to 1971 Census, there are 387 million people who are illiterate of whom 335 million are in rural areas and 52 million in urban areas As per the estimates of the status of illiteracy for 1978, there are 415 million people who are illiterate of whom 56 million are in the urban areas and 359 million in the rural areas. Among the 387 million illiterates in 1971, 172 million men and 215 million women are illiterate. In the rural areas, 149 million men and 186 million women are illiterate.[1] In this analysis, it is revealed that there are more illiterates among women than men Among

the weaker sections, 68 million illiterates were found among the Scheduled Castes and 34 million illiterates among the Scheduled Tribes.[2]

There are 97.1 million illiterates in the age-group of 15–35, of whom 78 million are in the rural areas and 19 million in the urban areas The Government of India made an assumption while introducing the programme of adult education, that there may be around 100 million illiterates now (1978) in the age-group of 15–35 So, by and large, these figures indicate that the level of illiteracy in the country is of a higher magnitude which perhaps, is one of the deterring factors for the implementation of any developmental programmes meant to benefit the people and also make them to sustain them

Since the attempt to bringabout literacy among all the people is a long-range task, the Government of India recognised the importance of mass-cum-selection approach In view of this, they identified the groups of adults in the age-group of 15–35 years as this group has the most productive capacity, and investment on this age group will have relatively higher benefits for the nation It has also been indicated through certain studies that 15–35 age group comprise the working force in the field of agriculture and industry

The distribution of year-wise coverage is as follows.

1978–79	1 5 million
1979–80	4 5 million
1980–81	9 0 million
198–482	18 0 million
1982–83	32 0 million
1983–84	35 0 million

It is expected that 100 million illiterates in the age-group of 15–35 would be covered under this programme by 1983–84 It is also envisaged to develop capability or infrastructure to organise the adult education programmes for 35 million persons by 1983–84 [3]

Assumptions and Objectives of NAEP

Exclusion of a vast majority of the people from the process of education is a most disturbing aspect of educational and social planning While determined efforts should be made to universalise elementary education up to the age of 14 years, educational facilities must be extended to adult population to remedy their educational deprivation and to enable them to develop their potentiality However, universalisation of elementary education and of adult literacy are mutually interdependent.

The government have resolved to wage a clearly-conceived, well-planned and relentless struggle against illiteracy to enable the masses to play an active role in the social and cultural change. Literacy ought to be

recognised as an integral part of an individual s personality The present thinking on adult education is based on the following assumptions.

(a) that illiteracy is a serious impediment to an individual's growth and to country's socio-ecomonic progress;

b) that education is not coterminus with schooling but takes place in most work and the life situations;

c) that learning working and living are inseparable and each acquires a meaning only when correlated with others,

d) that the means by which people are involved in the process of development are at least as important as the ends; and

e) that the illiterate and the poor can rise to their own liberation through literacy, dialogue and action [4]

Based on the past experiences with adult education programme, the following developmental strategies were delineated as a method of human resource development. First, by making a substantial part of the work-force literate and better skilled. secondly, by involvement of people in various developmental programmes which would make it possible to achieve optimum potential and minimise wastage, and thirdly, by creation of awareness among the poor regarding the laws and policies of government, it would be possible to implement the strategy of redistributive justice [5]

The range and the types of programmes to be organised under adult education programme are indicated as follows

a) Literacy with assured follow-up

b) Conventional functional literacy

(c) Functional literacy supportive of a dominant development programme.

(d) Literacy with learning-cum-action groups.

(e) Literacy for conscientization and formation of organisations of the poor.

The Concept of the National Adult Education Programme

Adult Education is conceived as a method of human resource development including literacy, functional development and creation of awareness among the poor regarding the impediments to their programmes and their inherent power to determine their destinies Awareness implies bringing about and understanding of the on-going process in his environment, its relationship to oneself, happenings in the social milieu, understanding of his rights and privileges and developing a feeling of responsibility for the outcome of any activity engaged in It also attempts to bringabout conscienti-

zation which refers to the process in which men, not as recipients, but as knowing subjects. achieve a dependency awareness both of the socio-cultural reality which shapes their lives and of their capacity to transform that reality.

Social organisation and the drive to read and write for purposes of higher social consciousness are the main behaviouristic outcomes that adult literacy programmes seek to accomplish

In functionality, the attempt is to relate his learning experience to the activities engaged in so that his capacity to handle problem situations in his work can be better managed, where the learning is intended to make him able to raise his resources and manage his own affairs. By and large, functionality is geared to the stimulation of the will for development and a creation of the capacity for development Literacy involves developing skills in writing, reading and numeracy Therefore, adult education while emphasising acquisition of literacy skills should be *(i)* relevant to the environment and learner's needs; *(ii)* flexible regarding duration, time, location, instructional arrangements, etc; *(iii)* diversified in regard to curriculum. teaching and learning materials and methods, and *(iv)* systematic in all aspects of organisation

Finances

In the Sixth Plan, an allotment of 200 crores has been made for Adult Education The estimate has been worked out based on the cost per person enrolled in the Adult Education Programme. This has been calculated at the rate of Rs 60 per person. Since it was expected that some of the participants may drop out during the period, the effective cost per learner now works out to Rs. 90 However. in view of the shorter duration of the programme and also possible voluntary contribution, the effective cost per learner is assumed to be Rs. 80. This does not, however, include the expenditure on planning and administrative structures, evaluation and monitoring, post-literacy and follow-up activities. The Planning Commission has indicated that the provision made for adult education programme was only one source of funds and funds for this purpose also would become available from other developmental sectors such as tribal development, rural development programmes and programmes for agricultural development It was also indicated by the Planning Commission that the outlay would be stepped up, if need be, based on the experience gained in the implementation of the programme. [6]

Planning, Administration and Organisational Agencies

This is the first time that the government have decided to launch a well-planned programme of adult education for such a large segment of the illiterate population. Planning for such a programme and its implementa-

tion will require support by a large variety of persons including social workers, perspective planners, management experts, systems analysts, interdisciplinary teams of academics and, of course, adult educators Exercise in planning have to take place not only in the Central and State Governments but also in local bodies, voluntary agencies, universities, professional organisations of teachers, etc The Government, however, have to play a leading role in the involvement of the various individuals, institutions and organisations It is also necessary to set up appropriate agencies for coordination at the state and district levels For this purpose, it was required that State and District Boards of Adult Education should be set up.

The existing administrative structures at the central, state and field levels were altogether considered insufficient to meet the task of implementing the massive programme of adult education and hence attempts were expected to be made to strengthen the structure for administering the programmes at all levels starting with the Ministry of Education and the Directorate of Adult Education at the Centre The Ministry of Education and the Directorate of Adult Education has a special responsibility for involvement of the various agencies, voluntary organisations, universities and colleges and taking up programmes such as training, production of teaching and learning materials and evaluation. They are also to explore the possibilities of involving the related ministries in the central government, other autonomous organisations and agencies in the National Adult Education Programme (NAEP)

In the planning and implementation of NAEP. the state governments have to play a very effective role They have to take up the responsibility of identifying various agencies and creating appropriate administrative and planning machinery with an independent Director, or an Additional Director with the Director of Education at the helm of affairs It was also expected that they would provide necessary supporting staff at all levels At the district and block levels, it was expected to have a District Adult Education Officer with necessary supporting staff

For implementing the programme, it was decided to involve voluntary organisations which have a record for working in the rural areas and implementing similar programmes for the betterment of people The state governments concerned were required to identify voluntary organisations based on certain criteria

In the planning and implementation of such a programme, the voluntary organisations have a special role to play The scheme aims at fuller participation by voluntary agencies either already working in this field at present or has the potentiality to do so Participation of voluntary agencies is visualised mainly in *(i)* planning and implementation of field programmes,

including post-literacy and follow-up activities; and *(ii)* resource development, particularly production of teaching, learning materials, training, research and evaluation. etc.

Their eligibility depends upon fulfilling the following conditions:

(a) Registered voluntary societies, public trusts and non-profit making companies would be eligible for assistance under this scheme. Ordinarily, agencies which are not legal entities would not be eligible. However, even agencies which are not legal entities may be considered for assistance provided the Collector/Deputy Commissioner certifies regarding the practical difficulties owing to which they could not be registered and regarding the bonafides of such organisations.

(b) In order to be eligible for financial assistance under this scheme an agency should *(i)* have a proper constitution or articles of association, *(ii)* have a properly constituted managing body with its powers and duties clearly defined in the constitution; *(iii)* be in a position to secure the involvement, on voluntary basis, of knowledgeable persons for furtherance of its programmes; *(iv)* not be run for the profit of any individual or a body of individuals; *(v)* not discriminate against any person or group of persons on the ground of sex, religion, caste or creed; *(vi)* not directly function for the furtherance of the interests of any political party, *(vii)* not in any manner incite communal disharmony; *(viii)* not proselytise; and *(ix)* eschew violence

The following activities receive assistance from the government

(a) Programmes of functional literacy accompanied by developmental action proposed to be organised for well-defined clientele, agencies working for women, Scheduled Castes and Scheduled Tribes would receive a special preference.

(b) Post-literacy and follow-up work including organisation of library services, production and dissemination of literature for neo-literates, creation of organisations of neo-literates, etc.

(c) Resource development activities such as production of learning/teaching materials, and training of adult education functionaries.

(d) Innovation and experimentation, research and evaluation.

(e) Holding of seminars, conferences, etc. and issue of publications for creation of an environment favourable to NAEP and involvement of various agencies for furtherance of this scheme.[7]

The National Adult Education Programme has envisaged the involvement of educational institutions in the implementation of the programme

through the National Service Scheme (NSS) in operation in the universities. They are expected to organise field adult education programmes There are also a large number of other functions which were expected to be attended to by them. These functions would include· *(a)* creation of an environment, *(b)* surveys, *(c)* preparation of curriculum, teaching/learning material and organisation of training, etc, *(d)* supplemental programme of instruction through audio-visual means, cultural programmes, sports and games, etc, (*e*) facilitating women participants by taking care of their children, (*f*) post-literacy and follow-up programmes, (*g*) construction of adult education huts in villages where facilities for organisation of adult education activities are not enough, and (*h*) evaluation and research

It is also expected that the employers of all organisations including the government would organise adult education programmes for their employees in literacy, skill, training, etc It was expected that the employers in cooperation with the Central Board of Workers Education and other agencies like Labour Welfare, would organise adult education programmes.

Municipalities and panchayati raj institutions are also expected to play an important role in the organisation of adult education programmes in the concerned areas It was envisaged that the municipalities should also take full responsibility for post-literacy and follow-up programmes in cities [8]

Instructional Agencies

For any kind of programme to be introduced in the sphere of education, invariably the elementary school teacher would be the choice as it happened in the past This, to a great extent, had not borne fruit in the past because of the heavy load of work the elementary teachers already have and hence this programme was considered as an additional burden Therefore, the National Adult Education Programme envisaged the possibility of enlisting the adult educators purely on voluntary basis Voluntariness will ensure local initiative, local thinking, local responsibility and self-reliance It was thought all the personnel to be involved in the instructional agencies would participate on a purely voluntary basis The motivation among the instructors is a pre-condition for motivating the learners. The potential instructors should have the linguistic capability to communicate as well as an attitude of equality towards the learners So, the possible persons that might participate in the programmes serving the above criteria of voluntariness are unemployed youth or employed youth on part-time basis, school teachers, students, development functionaries like VLWs, Patwari, Panchayat Secretary, retired people living in the village like ex-servicemen, etc So, the instructors were to be drawn from among them purely on voluntary basis hoping the emergence of voluntariness on the part of these people in this programme As a token of appreciation, an honorarium of Rs 50 per month would be given to these voluntary workers

in this programme However, it is also made very clear that this payment is not in any way related to the quantum of work and the type of services rendered but purely as a token of appreciation.

Resource Development

In the context of NAEP, resource development is intended to mean the instrumentality for transforming the concept and the objectives of the programme into a learning system Its elements include curriculum development, preparation of teaching/learning materials, training and evaluation. Resource methodology has to be based on the principles of flexibility and openness, devotion and efficiency

Some Problems in the Implementation of NAEP

Motivating people for adult education is one of the major problems. One of the factors affecting motivation is one's perception of the programme as for one, who has already gone throngh life, learning at this stage becomes rather difficult and hence looked upon as meaningless. Sometimes people may also have a feeling that from times immemorial. nobody has learnt anything in terms of what is being proposed to be done under NAEP for generations, but still they were able to manage themselves in their environment Therefore, in motivating the people, one should take care to identify the cultural and social constraints prevalent among the people which might hinder their motivation. By and large, one has to find out whether education is the prescribed goal of a particular community.

People are generally not motivated to programmes which do not yield immediate rewards or material gains In most of the development programmes, they have been used to get certain amount of material returns for their participation in, or adoption of the programmes, as the case may be. In adult education programme, the benefits are indirect in terms of social awareness, development of skills to perform their particular job functions and understanding one's role in relation to others where cooperative endeavours are involved This programme also is devoid of any monetary incentives except for non-financial incentives in terms of recognition, responsibility and appreciation In view of this, the task of the adult educator becomes all the more difficult whereby he has not only to organise a centre but get the people interested in its functions and sustain the programme as long as it is required. In other words, he must make an attempt not only to attract the people to the programme but also to reduce the drop-outs at different phases of its implementation Motivation is, therefore, a very crucial factor which perhaps can be induced through making their learning task meaningful in terms of relating it to his day-

attitude and capability of viewing opportunities and, as far as possible, learning situations should be developed based on learner's experiences

There are also problems in regard to finding the proper locale where people can assemble, and in providing the required facilities in order to attract the willing learners to the centre It has been found in quite a few studies in learning that the type of environmental facilities provided would also contribute to the learning process This is one of the factors that should be taken into account in organising Adult Education Centres.

There could be problems of finding proper instructors who not only have the voluntary spirit but also have a conviction in the programme. Quite often, if the instructors are not motivated, or bring in lesser innovative spirit along with them, the chances of their developing the desired learning atmosphere are rather doubtful. The selection of instructional functionaries must be done by careful screening and training is a prerequisite before they are put on the job However, the problem still remains as it may be difficult to find adequate number of such persons for this work in a village or area wherever the programme is implemented

The nature of the groups selected for adult education with an age range of 15–35 years may also create certain problems According to developmental psychology, this group consists of people who are in the late adolescence and early adulthood and also bordering on middle age. It has also been demonstrated in various studies on learning that it tends to decline with increasing age, more particularly the speed, dexterity and accuracy of learning Similarly, there is also a possibility of mental rigidity which also sets in sometime in the middle age. A tendency towards mental rigidity is merely a continuation of attitudes established in youth In such a situation, the learning of the older age groups, *viz*, those who are 25 years and above may be rather difficult than of those below 25 years Therefore, it may be necessary to separate them into different learning groups depending upon the age in order to facilitate their learning process. It has been mentioned that it is much easier to make somebody to learn something new than to make someone to unlearn the old and then learn something new.

While introducing any programme in a village community, for example, it is necessary that the community at large must have a general appreciation of the programme In case this appreciation and understanding is not created, the adult learners may feel certain amount of social ridicule while attending the learning centre as done by children Therefore, while organising an adult education centre, it may be necessary to give a broader meaning for this learning process and make every villager, either literate or illiterate, to appreciate this process, so that it becomes an accepted norm for the community.

Lastly, development of meaningful, related and useful learning and teaching materials to suit the groups, could constitute a problem. This has been emphasised in the objectives and hence one has to develop the local potential to prepare this material Till such time, there may be certain amount of imposition of the materials prepared at different levels and suited and tested at different environments

Conclusions

This paper is an attempt to give a brief view of the programme of Adult Education that has been under implementation in the country for the past six months. It generally reflects the type of activities that are proposed to be undertaken in the programme along with certain observations relating to its implementation

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RURAL DEVELOPMENT IN RAJASTHAN: THE 'ANTYODAYA' APPROACH

G L Verma

Introduction

Implementation of measures aimed at bettering the lot of the weaker sections of our society is a constitutional obligation of the Governments both at the centre and in the states It is realised that the fruits of the development programmes that have been implemented so far have, by and large, accrued only to the affluent sections of the rural society This has prompted the planners to adopt a target-oriented approach like the SFDA and the MFAL which were specifically meant for reaching benefits to small and marginal farmers who have some land base leaving out those who have no asset at all The working of these programmes have shown that landless agricultural labourers, artisans, members of Scheduled Castes and Scheduled Tribes, service-class people like scavangers, barbers and such others were still the people who have not been benefited from the development programmes.

The Government, therefore, have been on the look out for an effective programme which could make a real dent in rural poverty and better the lot of these sections of people.

Antyodaya—a Gandhian concept — has come to be considered as the answer to tackle the problems of the weaker sections Through this programme it is expected that the fruits of our planned development would reach the rural poor without any differentiation on grounds of caste, class, and religion, because the selection of beneficiaries under this programme is solely based on the extent of the poverty of the family. Regional differences and disparities also will not come in the way since the impact of the programme will be felt uniformly in all the villages The programme is to be implemented through the combined efforts of various government departments, voluntary agencies and financing institutions, all reaching out to the identified rural families at their door steps

The programme will first take into account the requirements of the poorest families amongst the poor and will slowly travel upwards to cover other families living below the poverty line Thus, once the poorest families are taken care of, which otherwise are not able to reach any agency for any type of help, they will be able to have resources at their disposal This in turn, will enhance their status of living and creditworthiness This will be a great help to them in making themselves self-reliant and taking advantage of other general developmental programmes

The Programme

The *Antyodaya* programme was launched in Rajasthan on October 2,1977 It envisaged identification of the five poorest families from amongst those who were below the poverty line in each village in the state All the 33,000 villages of the state are planned to be covered under this programme in a decade's time About six lakh families are expected to be covered during the first five years In the first year 1 6 lakh families have been identified

Based on the experience of the first year, the second batch of families have been selected during the second year and the process will be repeated till the target is achieved As a result of the experience gained in the initial year of the programme, a slight variation was introduced in the identification of the beneficiaries by taking into account population size of villages, the larger ones being entitled to higher proportion of poorer families. Accordingly, the number of families identified in villages with a population of 500 was three, in those with a population up to 999 was five, and in those with a population of 1 000 and above seven

Identification of Families

The poorest families were identified by the villagers themselves in Gramsabhas which were convened during the revenue campaign of the state government They were attended by all the villagers, including the MLA, MP of the area, sarpanch and other panchas of the panchayat, pramukh of the zilla parishad, pradhan of the panchayat samiti. The Gramsabhas were also encouraged to suggest various programmes to provide assistance to the selected families based on their interests Socio-economic profiles of these families were also prepared A plan of action at the block level was prepared which formed a part of District Antyodaya Plan.

During the first round of identification, it was realised that the achievement of this programme was mainly dependent on the proper identification of the families Keeping this in view the following instructions were issued to district authorities

1) Identification of families would be made in Gramsabhas The Vikas Adhikari (BDO) under instructions from the Collector would draw up programmes for holding Gramsabha meetings in each panchayat samiti The notices of such meetings would be sent to MPs and MLAs of the area at least seven days in advance.

2) The Gramsabha meetings would be supervised by an officer nominated by the Collector. The BDO and Tehsildar would be present at the meeting. The proceedings of the meeting would be prepared by the VLW/Patwari and signed by the Sarpanch, MP, MLA, departmental officials and others present

3) Patwari/VLW would prepare a tentative list of 10 to 15 of the poorest families eligible for selection under this programme. The physical presence of all such families included in the list is essential at the meeting. The programme elements and the criteria of selection of beneficiaries would be explained at the meeting. The Gramsabha would be free to accept or reject any names or all names from the tentative list. The decision of the Gramsabha would be final.

4) After the finalisation of the names of the beneficiaries, the Gramsabha would also discuss the needs of the selected families and suggest the best possible ways of providing them assistance to achieve a reasonable income level. A socio-economic profile of each family would be prepared and consolidated at the block level which will form the basis of the subsequent programme of providing means of livlihood to these families. A Block 'Antyodaya' Plan would also be prepared. These block plans will further be consolidated to form the District 'Antyodaya' Plan which would be discussed by the District Antyodaya Committee and then given the final shape.

5) Each identified 'Antyodaya' family under the programme would be issued an identity card.

The following criteria were laid down for selection of families under this programme.

1) Families not having any economic assets or earning member in the age-group of 15–59 years due to infirmity or old age.

2) Families without any economic assets but with one or more members capable of undertaking economic activity where the total income of such a family of five members is not exceeding Rs. 1,200 a year.

3) Landless labourers and artisan families whose annual income for a family of five members falls between Rs. 1,200 and 1,800 a year.

4) Other families with some land or other assets but are living below the per capita consumption level of Rs. 55 per month.

The process of identification for the first round was, by and large completed by November, 1977. Some of the special problems faced during the first round of identification were:

1) Of the 32,638 villages surveyed, in 1,280 villages no family below the poverty line was reported.

2) Some of the identified families did not like to receive any assistance under the programme due to 'caste' or 'family pride' considerations.

3) In many villages where five families were to be selected less than five families were found to be below the poverty line.

4) In many large-sized villages more than five families were listed due to pressure exerted by Gramsabhas but it was explained to them that number in excess of five would be considered in the second round of identification

Programme Components

The selected '*Antyodaya*' families represented a cross-section of interests as revealed during the pilot survey conducted before the initiation of the programme. All those whose interests belonged to different avocations were to be taken care of during the first year of the programme itself before the second round of families are selected for similar benefit Almost all the families selected preferred to get land though only about 20 per cent of them were engaged in agriculture The other occupations preferred were animal husbandry, rural industries, handicrafts and carts drawn by camel/bullock/donkey, etc In order to assist all the selected families and give them an assured means of livelihood a multipurpose programme was launched bringing into its fold all the existing developmental programmes, together with new schemes based on the local resources. A special feature of the programme was its extension approach to make the selected families understand their requirements and adopt appropriate means to achieve them. A brief description of some of the programmes included under *Antyodaya* programme is given here

1 *Old-age and Disability Pension.* The state government have decided to grant pension to old, infirm and disabled persons in *Antyodaya* families who neither have economic assets nor any earning member. Accordingly, Rs. 40 per month was granted to those families where there is one old, infirm or disabled person and Rs 60 per month to those families where the number of such persons was more than one The pension scheme existed even earlier but no concerted efforts were made to cover all eligible persons

2 *Allotment of Land* Agricultural land will be allotted to selected *Antyodaya* families wherever it is possible on priority basis. Enough loans for inputs, land development, etc will be arranged for these families to enable them to start cultivation as soon as possible

It is also proposed to allot the irrigable land under Rajasthan Canal Project to those families who are ready to work on wage employment in the area for at least two years

3 *Bank Loans* Bank loans are arranged by cooperative banks, commercial banks and rural banks for a number of schemes for the selected families Bank loans will be given to these families at the differential rate

of interest of 4 per cent per annum Some of the schemes selected by the banks to assist these families, their estimated cost, amount of loan and grants to be provided, loan instalments to be repaid and the net saving are presented in Table 1

There is also a provision to help the *Antyodaya* families in digging wells on their lands The assistance provided for digging a well is up to Rs 5.500 Assistance of Rs 4,700 is provided for an electric motor of 3 H P. and Rs 5,500 far an electric motor of 5 H P All *Antyodaya* families are eligible to get up to Rs. 1,500 per ha. towards land development

4. *Khadi Board Programmes* It has been proposed to distribute free of cost Charkhas and Karghas to *Antyodaya* families They will also be encouraged to establish small handloom units, oil ghanis and other small rural industries with the assistance provided by the Khadi Board

5. *Public Works*. *Antyodaya* families will be provided employment instantaneously if they report at any public work site anywhere in the state.

6. *Government Service*. Qualified candidates from the selected families would be provided jobs without going through the employment exchanges

7 *Other Schemes* Various other avenues like factory employment, employment in mining sector, wage employment in Rajasthan Canal Project Areas, etc. are also provided for these families. Priority is accorded to them in employment in the natural resource-based schemes in force in each district.

8 *Ancilliary Benefits*. *(i) Employment* *(a)* No registration is required with employment exchanges for getting a job, the identity card issued to selected families is sufficient, (b) Maximum age-limit for employment in class IV categories is raised to 45 in case of *Antyodaya* family members. *(ii) Educational*. (*a*) School-going children of *Antyodaya* families are exempted from payment of school fees and contribution to student fund up to the 11th class, (b) Free school dress and books will be supplied to all children of *Antyodaya* families A provision of Rs 4,65,000 was made during 1978-79 for this purpose *(iii) Medical* Health cards have been issued to *Antyodaya* families for recording of health statistics. The persons incharge of at the Primary Health Centres and sub-centres, including para-medical staff are to visit at least two families in two villages every month These families are provided free medical care (*iv*) *Animal Husbandry* Instructions have been issued to all In-charge of the Veterinary Hospitals/Dispensaries to give priority in medical care/treatment of the animals of *Antyodaya* families. (*v*) *Revenue* Various revenue enactments dealing with the allotment of land have been amended suitably to facilitate priority in allotment of land to *Antyodaya* families. (*vi*) *Miscellaneous:* (*a*) The document to be executed by *Antyodaya* families in favour of Khadi Board/Commission for obtaining loans has been exempted from the levy of stamp duty;

Table 1 : Economics of Various Loans under 'Antyodaya'

S No	Purpose	Total Capital requirement	Loan	Subsidy	Annual Gross Income	Instalment of loan	Net Income
	(A) Agricultural and allied Purposes						
1	Bullock Cart	4000	2667	1333	2430	708	1722
2.	A pair of bullocks	3200	2400	800	1713	640	1073
3	Camel Cart with Camel	4000	3000	1000	5500	930	4570
4	Donkey Cart	1000	667	333	1620	206	1414
5	Buffalo Cart with one buffalo	3000	2000	1000	4660	520	4140
6.	Buffalo Cart with two buffaloes	4000	2667	1333	4017	701	3316
7	Cow unit (2 Cows)	3000	2250	750	2510	1635	1875
8	Buffalo unit (2 baffaloes)	4000	2667	1333	1715	706	1009
9	Sheep unit (30 +1)	4250	3188	1062	2686	1251	1435
10	Goat unit (10)	3000	2000	1000	1260	550	710
11-	Poultry (100)	4300	2867	1433	1524	760	764
12	Piggery unit (3)	1900	1267	643	765	345	420
	(B) Other Purposes						
13	Mat weaving	600	400	200	1224	80	1144
14	Churi making (Manihari work)	1800	1200	600	5724	240	5484
15	Rural tailoring shop	450	300	150	1676	100	1576
16	Manufacturing of bamboo basket	600	400	200	1251	80	1171
17	Nivar making	800	534	266	2044	109	1935
18	Blacksmithy	700	466	234	2000	94	1906
19,	Village cobbler	400	266	134	1800	54	1746

20.	Carpenter shop	600	400	200	2000	80	1920
21.	Barber shop	300	200	100	1800	94	1760
22.	Bharbhuja shop	700	467	233	900	40	806
23.	Rural Tea-stall	550	367	183	3600	74	3526
24	Cycle repairing shop	650	433	217	1800	87	1713
25	Antyodaya band (8 persons)	3000	2000	1000	5240	400	4840

Source : *Antyodaya–Rajasthan's Attack on Rural Poverty*, Government of Rajasthan, Special Schemes Organisation, Jaipur, 1978

(*b*) Deferred payment facilities have been provided to *Antyodaya* families in case of mining leases in Sawai Madhopur district; (*c*) Funds to the extent of Rs 18 lakhs were earmarked for arranging allotment of 750 salt-pans in Deewana Salt lake in Nagaur district, (*d*) Priority is given to children of *Antyodaya* families in getting admission into the hostels run by Social Welfare Department

Organisation, Administration and Supervision

The policy, strategy and guidelines for implementing the programme is looked after by the State Policy Committee headed by the Chief Minister. Monitoring the programme at the state level is the responsibility of the Committee of Direction presided over by the Chief Secretary. A fulfledged Commissioner for *Antyodaya* Programme responsible for the direction, implementation and supervision at the state level acts as the Chief Executive reporting to the above mentioned

At the district level, the District Antyodaya Committee chaired by the District Collector consisting of officials and non-officials is responsible for the implementation of the programme.

At the sub-district level, Block Development Officer of the Panchayat Samiti is mainly in-charge of the programme supported by revenue officials, cooperative officials/and other departmental officials.

No separate implementing agency has been provided at the field level. The responsibility for implementation of the programme has been entrusted with the existing field agencies, *i e.*, revenue and development departments. The lowest field-level functionaries like Patwari and VLW have been assigned this work.

The panchayati raj institutions, the cooperative credit institutions and the banks have been assigned an important role in the implementation of the programme.

The panchayats at the local level have been made responsible with necessary legal support for ensuring proper coverage and after-care of the selected families The sarpanchas have been given the responsibility to check on the proper utilisation and continuance of the benefit given to the selected families

The Small Farmers Development Agency (SFDA) through which the funds for the programme are routed, coordinates the activities of field functionaries.

Targets

It has been estimated that in a period of ten years from the inception of the programme about two million families will need assistance to cross the poverty line of which 1.5 million families will be the direct responsibility of

this programme. The remaining families are expected to cross the poverty line on their own efforts as a result of general economic growth taking place in the country. About 6 6 lakh families will be selected for assistance under various schemes under the programme during the first phase of five years. It is also estimated that a sum of Rs 187 crores will be spent during this period on this programme of which Rs. 61 crores will be given as government grant, Rs 117 crores as loan through various financial institutions and Rs 9 crores will be spent by Khadi Board in the form of loans and grants. Another Rs 7 2 crores will have to be provided ,under state budgetary resources for payment of pension The details of the proposed coverage, plan of action and project outlays are given in Table 2

Achievements

The first stage of this programme was completed by September, 1978. A total number of 1,60,368 families below the poverty line were identified for providing assistance under various schemes By the end of March, 1979, 1,52,282 families were retained on the live list and of these, 1,39,986 were provided assistance in various forms The district-wise achievements up to March 31, 1979 are presented in Table 3.

The overall achievement of the state till March, 1979 was 91.7 per cent. The 100 per cent targets were achieved in seven (Sirohi, Udaipur, Jodhpur, Alwar, Tonk, Banswara and Sawai Madhopur) out of 26 districts While in most of the districts the achievements ranged between 81 and 100 per cent, it was only 70 6 and 58 0 per cent in Kota and Ajmer districts, respectively.

The highest number of families benefited were from Udaipur district (15,339) and the lowest (1,740) from Jaisalmer district.

In the case of individual programmes. land allotment covered the highest percentage (31 2) followed by bank loans already sanctioned till March, 1979 which stood at 29 41 per cent. The old-age pension was sanctioned to 17 2 per cent, other self-employment ventures to 5 5 per cent and employment was provided to 4 8 per cent of the selected *Antyodaya* families.

The highest number of benficiaries who were allotted land were from Udaipur district and the lowest from Sikar district. Similarly, the highest number of loans were sanctioned in Chittorgarh district and the lowest in Sikar district. The maximum number of old-age pensions were sanctioned in Bharatpur district and the lowest in Bhilwara district.

Thus, it was found that the achievements of this programme during the first year itself have been very encouraging

The second round of identification of *Antyodaya* families was started on November 15, 1978 About 1.11,779 families have so far been identified

Table : 2 A Five-year Perspective and Plan of Action for Antyodaya—Project Outlays at A Glance

S No	Item of Coverage	No of families	Financial outlays (Rs in lakhs) Govt Grant/ Subsidy	Khadi Board/Commission Subsidy	Khadi Board/Commission Loan	Institutional finance	Total outlay
1	2	3	4	5	6	7	8
1	Old Age Pension	40700	725 89	—	—	—	725 89
2	Land allotment	43900	—	—	—	—	—
3	Loaning programme						
	(a) ST	24500†	12 25	—	—	24 50	36 75
	(b) MT	263000	2710 88	—	—	6325 47	9036.35
	(c) LT	78000@	1117 50	—	—	3352 50	4470 00
	(d) Risk Fund @ 6%	—	387 06	—	—	—	387 06
	(e) Interest subsidy @ 4½%	—	616 03	—	—	—	616 03
4	Regular/Self/Wage Employment						
	(a) Khadi & Village Industries						
	(1) Khadi	85000	253 21	108 88	116 85	1746 75	2225 69
	(2) Village Industries	25000	—	83 22	600 78*	—	684 00*
	(b) Cottage Industries/Self employment Ventures	17000	33 00	—	—	77 00	110 00
	(c) Regular Employment	4500	—	—	—	—	—
	(d) Wage Employment	66253	72 40	—	—	—	72 40
	(e) Others	34647	175 00	—	—	175 00	350 00
5.	Administration	—	50 00	—	—	—	50 00
	Grand Total	606000	6153 22	192 10	717 63	11701 22	18764 17

† Excluded from grand total of 6 06 lakhs.
@ 52000 excluded from grand total of 6 06 lakhs.
* Includes Rs 469 14 lakhs working capital to village industries
Source *Antyodaya*—Rajasthan's Attack on Rural Poverty, Government of Rajasthan, Special Schemes Organisation, Jaipur, 1978

and about 57,882 of them have already been provided with assistance under various schemes

Evaluation

The *Antyodaya* programme in Rajasthan has been evaluated by the Programme Evaluation Organisation of the Planning Commission during September-October, 1978. The evaluation study has indicated the following.

i) Greater awareness about the programme has been created among the poor who are now looking forward for better employment opportunities The programme has helped the poor in raising their status and credit-worthiness

ii) Identification, by and large, was found to be fair with very few cases of doubtful identification in some districts

iii) Old-age pension scheme existed earlier, but its coverage was extended to cover *Antyodaya* families with larger financial allocations

iv) At present, the financing of the *Antyodaya* programme is done out of the allocations made for various sector/area programmes like SFDA, DPAP, DDAP, etc It is like extending the sectoral dvelopment schemes to landless and casual labourer families who have no security to offer

v) With the liberalisation of loaning arrangements by the Reserve Bank of India and refinance facilities available from Agricultural Refinance Development Corporation it should be possible to achieve a break-through in the implementation of the programme

vi) There is an urgent need for strengthening of the supervisory field staff of commercial banks, specially to ensure proper utilisation of loans advanced

vii) There is a need to introduce the scheme of 'Risk Fund' on the lines of SFDA programme

viii) Strengthening of package of service of technical know-how together with provision of raw materials and marketing facilities is required.

ix) Provision of credit facilities might be considered for emerging consumption requirements, medical care, etc. This will help those beneficiaries whose assets start giving income after sometime

x) The adequate loan amount to cover the entire cost of the project or unit should be given to beneficiaries for effective economic activity.

xi) The insurance rates for cattle should be brought on par with the rates applicable to the SFDA beneficiaries

Table 3 · District-wise Progress of Antyodaya

S No	District	No of villages	Net No of families to be benefited	No of Families benefited: Old-age Pension	No of Families benefited: Land allotment
1	2	3	4	5	6
1.	Sirohi	436	2584	543	1206
2.	Udaipur	3029	15339	1933	9382
3	Jodhpur	701	3622	1626	310
4	Alwar***	1876	8561	1260	4108
5	Tonk	1005	3797	556	1503
6	Banswara	1462	6679	163	3727
7	SW Madhopur**	1531	6301	1385	507
8	Chittorgarh	2358	8709	447	2503
9	Jhunjhunu	685	3287	485	—
10.	Jaipur	2716	12242	1988	2523
11	Bhilwara	1521	3922	95	2985
12	Pali	821	4323	634	1306
13.	Bundi**	733	3327	—	1292
14	Jaisalmer*	409	1740	180	1036
15	Sikar**	811	5606	1449	83
16	Churu	844	3943	320	367
17	Bikaner	538	2666	274	528
18	Ganganagar**	1511	6072	1741	1598
19.	Jalore	595	3410	786	781
20.	Dungarpur*	823	4160	479	475
21	Barmer	844	3780	533	938
22	Jhalawar	1450	6514	696	2477
23	Nagaur	1209	5777	774	315
24	Bharatpur**	1886	11428	3664	786
25.	Kota	1878	8041	1283	1805
26	Ajmer	957	6782	792	1167
	Total	32638	152582	24086	43708

Source Special Schemes Organisation, Secretariate, Government of Rajasthan, Jaipur

Programme of First Round in Rajasthan as on 31 3.1979

under various Schemes

Employment	Credit coverage: Loan disbursed	Credit coverage: Sanctioned but not disbursed	Total	Others	Grand Total	Percentage of families covered
7	8	9	10	11	12	13
5	830	—	830	—	2584	100 0
18	3824	178	4002	4	15339	100 0
49	728	259	987	650	3622	100 0
127	2333	649	2982	84	8561	100 0
36	1626	69	1695	7	3797	100 0
594	1921	38	1959	236	6679	100 0
76	2683	1137	3823	513	6301	100 0
663	4728	768	5046	34	8693	99 8
18	1958	292	2250	515	3268	99 4
1541	2933	2160	5093	1008	12153	99 3
38	418	56	474	270	3862	98 5
99	1461	725	2186	3	4228	97 8
36	528	1347	1875	—	3203	96 3
13	181	156	337	100	1666	95 7
64	1925	625	2550	1198	5344	95.3
11	1561	828	2389	641	3728	94 5
33	588	330	938	646	2419	90 7
78	955	513	1468	568	5453	89 8
47	1261	145	1406	—	3020	88 3
291	1160	1152	2312	92	3649	87 7
11	861	254	1115	651	3248	85 9
225	833	1090	1923	92	5414	83 1
958	1632	695	2327	403	4777	82 7
1262	2408	1193	3601	—	9313	81 5
225	1373	956	2329	38	5680	70 6
223	905	841	1746	7	3935	58 0
6741	41164	16526	57690	7761	139986	91 7

* As on 15.3 79

** As on 28 2 79

*** As on 15 2 79

xii) Land allotment to the beneficiaries should invariably be followed by the loan assistance for land improvement Food for work scheme could be fruitfully implemented in such cases including minor irrigation works.

xiii) There is an urgent need to have a well-defined machinery for implementation and follow-up of the programme and functions clearly laid down

xiv) The special schemes commissioner at the state level who is now assigned complete charge of this programme in addition to his normal duties, will have to be provided with additional supportive secretariate/directorate assistance for effective monitoring and overseeing of the programme.

xv) There should be a regular system of concurrent evaluation of the working of the programme to adopt timely corrective measures.

Future for the Programme

As mentioned earlier, the targets achieved under the programme are very high—ranging between 58 and 100 per cent. This has encouraged many other state governments to adopt this programme. The central government has announced that the central help for this programme will be available to states if it is carried out under the IRD programme. The programme is already introduced in Uttar Pradesh, Himachal Pradesh, Bihar, Gujarat, Manipur and Orissa and the process of identifying the beneficiaries is on in these states. In Rajasthan, the programme has the support of the World Bank and President of the World Bank assured that the Bank and the Ford Foundation would assist this programme. The State Government has been able to convince the Reserve Bank of India in revising the system of advancing institutional credit to the poorest people who have no asset to offer as security against loan What is necessary at this stage is not only to concentrate on achieving targets of identification of beneficiaries but also to utilise the various facilities provided to achieve the real impact of the programme on the social and economic life of the target individuals How these beneficiaries are utilising the facilities and assets given to them, whether they will be able to maintain the benefit over a longer period to become self-sufficient and self-reliant and what changes in their outlook and value-orientation are taking place are some of the moot points in the implementation of the programme.

One of the problems that is being often commented upon in regard to implementation of the programme is the role of voluntary agencies. Is there any need to assign this work to a voluntary organisation? It is considered that a voluntary agency is generally more flexible and operates from the grass-roots level. It is generally felt that the voluntary organisations are able to organise the poor in a more systematic way Their association, it is felt, will ensure that the fruits of the programmes reach the people for whom

they are really meant What these deprived sections of the rural society need to know at present is why they are poor and how they can secure their fair share from the state resources. If voluntary agencies, are allowed to play their part, there is greater chance of benefits reaching the rural poor and an awareness being created among them

The success of the programme will mainly depend upon fair selection of the families. There have been some wrong selections in the first series of families wherein some who really did not deserve assistance, managed to get it Fortunately, for the second year's selection the state government laid down very strict norms to be followed in this regard and sharing of responsibilities at various levels has also been fixed Another important aspect to be looked into by the state government is the repayment of the bank loans by the beneficiaries As has happened earlier in the case of other programmes, the banks run into difficulties with the non-payment or delayed payments of the loan instalments What is needed is to create an awareness among the beneficiaries to repay their loans. It is at this stage that the proper role of elected representatives at local levels is envisaged in educating these beneficiaries regarding the repayment of loans. Further, the utilisation of the loan should be intensively supervised to avoid any possible diversion for unproductive purposes If necessary, the state government should not hesitate to provide the necessary laws for the collection of loans from the beneficiaries Further, as far as possible, payments in cash to the beneficiaries should be avoided to obviate their possible misuse.

As could be seen from the targets achieved and the determination of the Government of Rajasthan to bring the development process right down to the grassroots level, the programme is definitely going to make a dent into the poverty of the rural population of the state The tempo needs to be sustained

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Section IV

ORGANISATIONAL ASPECTS OF RURAL DEVELOPMENT

RURAL DEVELOPMENT ADMINISTRATION

Shiviah

Given the integral connection between Panchayati Raj and rural development administration, this Chapter can be regarded as a sequel to the chapter on Panchayati Raj. The discussion in the latter relating to the historical, ideological, institutional and technological aspects is quite germane to the exposition below We will, therefore, avoid extensive references to these, and concentrate attention on rural development administration as such

In a country where nearly 80 per cent of the population lives in rural areas, rural development administration spans the bulk of administrative activity In other words, the main component of 'development' has to be rural development, and the main referent of development administration has to be rural development administration It is a matter of vital significance to the future course of planned socio-economic change that a palpable urban *orientation in administration has been yielding* place, over the years, to an increasingly sharper accent on rural development administration. This shift reflects some compulsions and trends over nearly three decades of developmental planning. We may touch upon the more salient ones here. Growth in population, and the consequent problem of *per capita* land shrinkage, has necessitated a keener attention to the task of managing our rural economy more efficiently, not only in the sense of increasing agricultural production but also in the sense of occupational diversification Along with the problem of *per capita* land shrinkage is that of poverty, the proportion of those below the poverty line has increased While this may be partly attributable to the increase in population, planning strategies and administrative performance have their share Experience in India and other developing countries has shown that the 'percolation effect' of technology-cum-urban oriented development had only a marginal impact, the green revolution has bypassed the poorer sections, and the situation with regard to their purchasing power and consumption levels is threatening to assume crisis proportions New trends in development economics indicate a far sharper focus on the poorer sections, and the need for tapping their contribution—a massive contribution—to the national economic cake. The size of this cake, in other words, is linked with distributive measures informed by social justice In the words of the World Bank Sector Policy on Rural Development, the objectives of rural development 'encompass improved productivity, increased employment and thus higher incomes for target groups, as well as minimum acceptable levels of food, shelter, education and health'. In the Indian context, such an approach could be operationalised in terms of promoting

the socio-economic wellbeing of agricultural labourers, marginal and small farmers, and other weaker sections; provision and strengthening of infrastructure in rural areas, provision of institutional finance, special attention to backward areas and groups (*e g.*, tribals), and so on. Translating all these objectives, and more as we go along, is the task of rural development administration Such indeed is its sheer magnitude that it is going to change, if it has not already, the total complexion of administration as such Law and order and other aspects of regulatory administration will have its place depending upon the time and situation There is considerable force in the statement that in most cases officers are now administering not people but programmes This is particularly true of levels from the district downwards

To appreciate this one need not be unduly harsh about 'district administration' before Independence There are numerous cases of energetic administrators whose administration was marked by commendable humanitarian zeal, in a few cases this zeal was 'excessive', and the administrators concerned acquired a reputation for crankiness[1] Some may have a nostalgia for those 'good old days', but not many can evoke the old context However efficient and benign, the context being colonial, the administration could at best be paternalistic Free India, with a Constitution embodying the radical thrust of liberal and socialist ideologies, has had a new polity In the context of this polity, administration had to be visualised as an instrument of socio-economic change, and of service to the common people in tune with the ethos of the ideologies mentioned above. Paternalism was not adequate for this ethos.

When a massive experiment in rural development administration was launched in 1952-53 (C D & N E.S), the implications of the new polity began to unfold rather vividly The phenomenon of an army of developmental functionaries fanning out into rural areas with a view to bringing about an allround development of the rural economy and society signified a change of historic magnitude. The perspective and programmes articulated by the Planning Commission, with several relevant details spelt out in successive plan documents, lent considerable specificity to the whole movement Ministries and departments dealing with different aspects of these activities have proliferated at the Central and State levels. There has been, of course, an equally impressive complement of the field-level staff

Another factor making for qualitative difference has been the widening and deepening of the technological input. This has been most conspicuous in the field of agricultural and allied activities But village and small-scale industries too have had their share. So much so that many 'generalist' administrators would not be able to do full justice to their tasks unless they paid keen attention to this input. There are examples of 'generalist' administrator showing a level of grasp of technological details almost matching that of specialists. Other things being equal, such a grasp would

enable them to show better results The slogan 'lab to land' serves to underline the need for a better grounding in the relevant aspects of science and technology on the part of all developmental functionaries. The inter-relationships among the functionaries transmitting or "administering" the technology have developed a diagonal pattern also in addition to the vertical and horizontal structures which have been known

These changes and trends taken together explain much that is distinctive to the ethos and content of rural development administration. They are important, but when it comes to 'administration' proper, our central concern has to be with 'implementation'. *In terms of performance and results*, rural development administration in India can be said to have been characterised by several disquieting gaps Among the factors frequently mentioned in this connection is 'lack of coordination'. Of a piece with this, but wide-ranging in scope, is the desperate cry 'And above all implementation' This expression not only reflects a sense of urgency with regard to improving our developmental performance, it also suggests that while our 'policies' and 'planning' may be all right, even good, it is on the implementation front that our performance has fallen far short of the requirements or expectations.

Criticism, of course, is useful, but unless it is matched by understanding and action, frustration would be inevitable. A serious shortcoming of a good deal of criticism heard in our country and elsewhere is that it (the criticism) is anchored to the traditional approach to administration It is not adequately appreciated that a new approach—a new science of rural development administration as it were—is necessary in order to cope with the new complexity referred to above Coordination and implementation have to be viewed in this perspective A brief statement, even if it involves a few repetitions, may provide some conceptual clarity.

Coordination, as the process of harmonising the activities of structures and individuals with a view to achieving organisational goals, is an integral aspect of all complex organisations In the traditional social, political and technological context, administrators had a relatively narrow view of coordination, because both structures and individuals either were or conceived to be relatively simple propositions : take the feudal context, for example, where the authoritarian ethos made the problems of coordination less intricate The theory and practice of administration are quite different now. When we talk of organisational complexity, we not only have in mind the size, but also level of technology, specialisation of skills, diversity of programmes, environmental compulsions and approaches to human relations conditioned by radical political ideologies. Proponents of 'new public administration', therefore, focus attention not only on *efficiency* ethic but also *equity* ethic, and efficiency and equity involve technological and ideological dimensions The imperatives of 'development administration'

thus fall into perspective. During the last quarter of a century, the management movement has served to bring 'productivity' into sharper focus. Complex objectives and technological considerations enmesh structures and individuals in such a way that coordination has lost the simplicity of the personalised or traditional administrative idiom If an organisational complex is conceptualised as administrative space, we have to appreciate that it is a multi-dimensional space where the elements to be coordinated constantly interact with environment It follows that coordination itself will be meaningful and effective to the extent that those responsible for coordination are in tune with organisational goals, a thing which is easier said than done. At the cost of sounding trite, we may, therefore, remind ourselves of certain basic, and in a sense universal, tasks of modern development administration, including rural development administration, with which we are concerned here.

i) Raising the productivity of material and human resources in consonance with certain key values human dignity, equity, participation and a richer life for all.

ii) Harmonising individual and organisational goals. This is expressed by the dictum : 'Making work productive and the worker achieving'.

iii) Optimising the potential of technological growth for production in relation to socio-economic development both in short-term and long-term perspectives

These propositions do not belong to the esoteric realms of abstract political philosophy For us today they reflect living historical realities Those concerned with the theory and practice of administration might well consider them as the hard core of a tested body of knowledge since the expanding frontiers of the 'management movement' started engulfing the somewhat privileged domain of public administration The conventional barriers between 'management' (earlier confined to the domain of private business enterprise) and 'public administration' have been breaking down. Besides motivational and communication skills, a wide array of techniques and methods developed by the exponents of management is grist to the mill of public, including rural development administration Among other things, its 'proactive approach' a sharp accent on productivity, results and performance, a systematic attention, involving receptivity to the contribution of behavioural sciences, to motivational and communication dimensions working out an organisationally and technically sound operational plan, and ensuring its implementation with reference to appropriate procedures, methods and techniques, deserve serious attention All this goes far beyond the traditional 'hunch', 'intuition' and 'common sense' approach, they have a place, but in the well-integrated framework of experience and scientific knowledge

It is not suggested that the management approach is relevant to all aspects of public administration to the same extent Regulatory administration, for example, is different in some respects from development administration. though certain organisational problems can be regarded as universal. In general, the management approach has shown more tangible' results in 'business'-oriented public concerns, being more easily amenable to the quantitative criteria of productivity. Rural development administration, far more complex than either (more about it later) falls somewhere in between. In so far as quantitative criteria like production and productivity have a vital bearing on 'performance' in rural development administration the management approach is of more direct relevance here.

Before we proceed further. a word about the terminological question may not be out of place. The standpoint taken here is that of 'new public administration'. distinguished from 'old' public administration on the basis of the management input In this sense, the title. 'management in rural development administration' would have sounded more appropriate. Even so. we have retained the more familiar title with a view to obviating confusion and. perhaps. controversy, for management' still evokes 'private' enterprise and 'profit'. In any case, the focus on *efficiency* ethic and *equity* ethic being an integral part of 'new public administration'. particularly rural development administration. the expression 'management' would have had a tautological ring in the context. It (the expression) has also acquired an unsavoury connotation among even well-equipped and well-motivated administrators. for whom 'management' is so much of coired terminologies, mathematical ministrations and welfed charts. unrelated to the concrete problems of field administration. All concerned. however, would agree that management is a question of substance, and not of form If so. 'administration' by itself would be equally good, besides being more convenient from the point of view of communication. Administration would be more evocative in this chapter. while "Management" could be procreative for a responsive delivery system for rural development

Rural development administration is an organisational complex involving the relevant central ministries. state departments, headquarters and field organisations and shop floor level set up spanning a country of subcontinental size and diversity. Articulation of an operational plan and its efficient implementation involves an extensive and highly skilled exercise in structuring. Thus the organisational complex mentioned above can be visualised as a collection of organisations (including corporations, agencies, directorates, boards. etc. to the extent they interact with the field) The tasks of each major organisation can be visualised as a collection of 'programmes', and of each programme as a collection of 'projects'.

An attempt will be made here to outline the salient features of a general management system known among students of 'management' as 'Management by Objectives' (MBO) in order to perceive its intrensic relevance to rural development management too Though practical administrators could and do regard MBO as a 'tool' of management. it is general enough to deserve the appellation, 'philosophy of management'.

According to Peter Drucker, 'MBO rests on a concept of human action, human behaviour and human motivation' This concept is basically derived from 'Theory Y', according to which the assumptions of 'Theory X'—that an average human being has an inherent dislike of work, and will not put forth adequate effort towards the achievement of organisational objectives, unless directed, controlled, coerced and threatened with punishment—are contrary to the observed trends, and hence untenable The two basic propositions of 'Theory Y' are .

i) People will exercise self-direction and self-control in the achievement of organisational objectives to the degree that they are committed to those objectives Self-control means stronger motivation, higher performance goals, and broader vision.

ii) If such commitment is large, many conventional external controls will be relatively superfluous, and to some extent counterproductive.

MBO understandably pleads for closer attention to wider human goals and needs, to factors in the environment, to motivation and communication, and calls for, in general, a style of management (or administration) informed by a wider vision Related to this, but operationally more specific, is the proposition that MBO does not regard 'organisation' as a closed system In the current parlance, a 'systems perspective' is built into MBO.

The basic propositions of MBO could be schematically summarised as follows :

i) All organisations have objectives.

ii) Organisational performance depends upon effective operationalisation of the objectives. The time-perspective.

iii) There is a hierarchy of objectives corresponding to the functional-cum-administrative hierarchy. Depending upon the context, 'targets' could be used interchangeably with 'objectives'.

iv) Performance levels have quantitative and qualitative dimensions.

v) Objectives should be defined as systematically and clearly as possible Wherever possible, they should be quantified. In all cases, they should be intelligible : pointed and simple, but not simplistic.

vi) Focus and priorities: The concept of Key Result Areas—Management Job Description—Key Tasks, Criteria of Performance and Management Information

vii) Identification of Objectives · (a) Strength, Weakness Opportunities, Threats Analysis (SWOT), (b) Free and frank discussion; (c) Participative management—operationally relevant participation; agreeing upon objectives, maximising the area of self-direction and self-control.

viii) Action planning, programme implementation; monitoring and feedback, supervision and control, human resource development

Among the efforts in the framework of MBO, the 'Programming and Implementation Management System', evolved with reference to the Special Rural Development Programme (SRDP) in Kenya, East Africa, deserves serious attention. Before we explain its salient features, we may list some perceived deficiencies in development administration in India, with a view to making our analysis more concrete

i) Development programmes in India have often been marked by a fragmented and compartmentalised approach in formulation on the one hand, and a 'top-down. inflexible, one-way system of implementation' on the other

ii) Lack of emphasis on primary tasks, and inadequate appreciation of the linkages between various schemes/activities and the primary task or core activity. (In the MBO terminology of Key Result Areas).

iii) A higher salience of power and status orientations, authoritarianism, unresponsiveness, formalism, and rigidity.

iv) Inadequate operational planning, resulting in duplication, wastage, compliance with formal instructions and relative indifference to results and performance.

v) Defective supervision and reporting, often negative. perfunctory, and inquisitorial.

Vague talk about coordination, and exhortations to improve implementation, will not be of much use if these deficiencies are not remedied in terms of a well designed management system. The Programming and Implementation System referred to earlier provides, hopefully, a good enough basis for undertaking more sharply focussed and specialised exercises appropriate to a given administrative context.

The System has been conceptualised (for details, vide Robert Chambers, *Managing Rural Development : Ideas and Experience from East Africa.* Uppsala The Scandanavian Institute of African Studies, 1974) in terms of

seven 'principles' and four 'stages' of programming. The principles are as follows.

i) Joint programming by all those responsible for implementation, at the preparation of a project stage.

ii) Staff of different departments taking part in setting their work targets

iii) Collegial sanction against poor work

iv) Lean and functional reports

v) Communication direct from the implementer to the point of bottleneck or delay.

vi) Functional meetings used sparingly.

vii) Sophistication in simplicity

And here are the four 'stages' of programming

i) Listing and agreeing upon the operation to be carried out.

ii) Identifying and agreeing who is responsible for which operation

iii) Agreeing upon start and completion times for each operation.

iv) Checking for feasibility, agreement and acceptance of targets.

We may note that these 'principles' and 'stages' involve a keen appreciation of the inextricable link between 'coordination' and 'implementation' Better management not only means better programming and implementation but also better coordination Coordination, after all, being an essential condition of better implementation, one might as well say that better coordination means better management. This, however, is not a question of mere verbal sequence The crucial distinction is between new public administration and traditional public administration, the former with a perspective, knowledge and skills of an order geared to the requirements of complex economic and social tasks of our time and the latter characterised by relatively authoritarian, leisurely, complacent and unresponsive ways It would be logically in order to say that 'coordination' is built into the very texture of 'management' approach Coordination in the MBO perspective is quite different from that of traditional administration, in the latter, 'power' tended to get disproportionate emphasis : the coordinator should be the 'boss' (Mark of the authoritarian ring!), or else he cannot coordinate. The exponents of management are more optimistic and for good reasons, but they do not deny the need for a coordinator, hierarchy and authority. They, however, assert that hierarchy and authority should be related to the achievement of results, to *performance*, rather than to the gratification of the desire for power The distinctions may appear to be tenuous, but they are real They also assert, and for good reasons, that people are willing to perform and will perform better, if they have a clear idea of the objectives and roles, and participate in the process of defining and clarifying them for

relevant operational purposes, participation, in other words, has no populistic overtones This way of getting things done is at once more effective and is in greater harmony with wider human goals and needs

This is the essence of systematic structuring in terms of the basic postulates of MBO Understand in this sense—and not mechanically, it can be applied to any level without waiting for structural changes above. A preoccupation with the structural aspect, *ab initio,* could often be a cloak for poor motivation and unwillingness to improve administrative competence. Poor performance is not invariably attributable to structural factors. In any case, the direct concern of field administration being with implementation, better implementation cannot but impinge upon higher reaches of planning, compelling, sooner or later, serious attention to the structural aspect It is not at all contended here that the structural aspect is unimportant

A general management system like this, while useful, cannot be considered adequate in relation to specific programmes and projects Thus, the Command Area Development Programme will require a different management system (in terms of details) than SFDA and DPAP. The programme content of DPAP, with its focus on watershed management and problems of dryland farming, would be quite different from that of SFDA; both will, therefore, require operationally distinct management systems. And so is the case with ITDP.

A programme, if it is sufficiently big in size and complex, can be 'projectised', that is to say, broken into discrete sub-systems, a set of interrelated activities Achievement of objectives being the pervasive purpose of all administrative activity, a project has its objectives, but projectisation understandably involves greater specificity in this regard.

Without being deterred by the growing volume of sophisticated literature around project planning and implementation, we may note that action in the field of rural development lay at the project level The project approach has had considerable appeal and relevance *vis-a-vis* the new strategies of rural development aimed at the economic and social betterment of target groups. Keener attention to weaker section is enjoined on the entire system. Detailed work at the micro level is becoming increasingly important, especially in view of the sharp focus on 'family' as the unit of planning On the basis of a fairly detailed assessment of the economic conditions, rural families will be called upon to exercise economic options for increasing their income, with active guidance and assistance from project administration Planning and implementation of tasks like these will make heavy demands on project functionaries Before we come to the question of knowledge and techniques to cope with these demands, we may observe that the 'implementation system' in rural areas has shown considerable resilience to the new strategies and organisational experiments. An

administratively sound 'projectisation' approach can help activate this resilience, and facilitate the introduction of innovations on a large scale

Project management is not a simple proposition, though the existing level of knowledge and techniques is such that we can no longer be said to be in the stage of 'groping' Details of micro planning require a professional approach, so do those of implementation A sensitive appreciation of the technological, spatial, environmental, participatory, motivational and communication dimensions go into the making of, *inter alia,* a sound 'project' approach

Considering the vital importance of implementation of rural developmental programme, we may dwell at some length on it Besides the general propositions made in connection with the Programming and Implementation Management System earlier, it is worth reiterating that they should be supplemented by special techniques appropriate to a given project. Among these techniques, PERT/CPM have had, perhaps, the widest vogue. The formidable array of circles, boxes, arrows, symbols, etc. has often scared practical administrators It is true that the formalistic excesses of some exponents of management has a good deal to do with this situation. Again, stressing the value of content in contrast with form, the thrust of PERT/CPM can be easily appreciated Proper sequencing is a valuable aid to efficiency Things which could be done simultaneously had better be done simultaneously, with a view to minimising delays and securing the most efficient use of resources Keeping in view the elements of a given practical situation, it should be possible to derive a lot of benefit from systematisation, structuring and moulding them to not elementary level for rural development but essential camponents for their application. To overdo them, however, is to indulge in formalistic fallacies Administration is a matter of judgement and discretion, and it is for the administrator to decide what adaptation and adjustments would be necessary in a given situation, this, of course, implies that aids to efficiency are not rejected out of hand, and that there is a sincere attempt to derive maximum possible benefit from them

This, in short, is the 'management' framework for rural development administration One may be struck, if not unnerved, at the proliferation and diversification of structures. With much simpler and far fewer structures, there has been the nagging problem of coordination Now this problem will become serious not only quantitatively but also qualitatively, thanks to technology. Improvements in technology have to be related to the desired fit between socio-economic development and technology, in other words, to 'appropriate technology' So, when we talk of 'impact of technology', it is something more complex now. What is required is a better understanding of the total process and of mutual relationships The strides in agricultural research, the pivotal role of the extension machinery, the need for a highly developed and integrated socio-economic infrastructure, and the inevitable

involvement, and linkages with, regulatory administration, etc, underline the necessity for collaborative and coordinated action between generalists and specialists, and among generalists and specialists *inter se,* right across horizontal. vertical and diagonal lines There is so much at stake here that the future of rural development administration can be said to lie in coordination.

To say that we are back to square one would be palpably unfair! The general and special management systems (including those relating to projects) discussed earlier represent significant advances in 'administrative technology' Refining and applying them properly to specific contexts is a far more effective way of ensuring coordination than 'bungling along' in terms of conventional rule of thumb methods. This does not, of course, imply that coordination is the automatic resultant of some abstract system. Both men and material present difficulties, and it requires understanding and skill of a high order to overcome them It is in this pragmatic sense that coordination is built into the general and special management systems mentioned above.

In dynamic administrative contexts, the task of management does not end there If one end of the pole of management is proactive approach, the other end is the corrective approach Knowledge and skill have to be continuously updated to cope with changing requirements For this, continuous feedback from the field is essential Decision makers should have a sound information and evaluation base to be able to make midcourse corrections. It is in this context that well-designed 'information', and monitoring and evaluation systems assume crucial importance Needless to say, here too there is no need for groping, a formidable body of knowledge and techniques is waiting to be tapped

RESOURCES OF PANCHAYATI RAJ INSTITUTIONS FOR RURAL DEVELOPMENT

K V Narayana Rao

Panchayati raj institutions are the creatures of the state governments in pursuance of item 5 of the State list in the Constitution of India which places "Local Government that is to say, the constitution and powers of , district boards, and other local authorities for the purpose of local self-government or village administration" under the exclusive jurisdiction of the state government What distinguishes the panchayati raj institutions from the organs of local government in rural areas of India that existed before the advent of panchayati raj is the fact that these institutions—particularly the panchayat samiti and the zilla parishad—are envisaged as agents and instruments of the state government in developmental activities.

The financial resources of panchayati raj institutions can be categorised broadly as follows (1) taxes and fees levied by them, (2) assistance from the state government by way of assigned revenues and grants; (3) income from remunerative enterprises, property vested in them and income from investments, (4) loans, and (5) public contributions, if any.

Each of these categories are described below with reference to each tier of panchayati raj

Taxes and Fees

The central or state governments can mobilise considerable resources by adopting a large number of fiscal measures intended to increase savings, and raise taxes. They may also borrow from internal and external sources. The measures open for local bodies in general and the panchayati raj institutions in particular are quite limited. The powers of taxation of the central and state governments are laid down by the Constitution of India. As the creatures of state government, the panchayati raj institutions can have only those powers which the state governments devolve on them from their own taxation powers listed in items 45 to 66 of the State List of the Constitution. One of the principal aims in establishing democratic bodies at the district, block and village levels is to mobilise local resources to a greater extent that has been possible in the past.

Under the Scheduled Taxes Rules, framed under the Government of India Act, 1919, the following were the taxes which were to be utilised by or for the (rural or urban) local authorities: (1) a toll, (2) a tax on land or land values, (3) a tax on buildings; (4) a tax on vehicles or boats; (5) a tax on animals; (6) a tax on animals and domestic servants; (7) an octroi, (8) a terminal tax on goods imported into or exported from a local area, save

where such tax is first imposed in a local area in which an octroi was not levied on or before July 6, 1917; (9) a tax on traders, professions and callings, and (10) a tax imposed in return for services rendered, such as (*a*) a water rate, (*b*) a lighting rate, (*c*) a scavenging, sanitary or sewage rate, (*d*) a drainage tax, and (*e*) fees for the use of markets and other public conveniences.

There was no reference to such local taxes, either under the Government of India Act, 1935, or the Constitution of India The Local Finance Enquiry Committee (1951), appointed by the Government of India as well as the Taxation Enquiry Commission (1953–54) recommended the reservation of certain taxes to the local bodies but no such demarcation has taken place statutorily so far.

The financial resources available for panchayati raj institutions need to be studied in the context of the functions and duties devolved upon them. There is much similarity in the functions entrusted to village panchayats in differernt states. The functions that the gram panchayats are expected to perform in any state are listed in detail by the Statutes providing for the establishment of gram panchayats in that state The lists are quite impressive. For example, the Andhra Pradesh Gram Panchayats Act, 1964, makes it the duty of the gram panchayat to provide for 12 items under Section 54 (a) and 7 other items under Section (b) By and large, every village panchayat is expected to make provision for safe drinking water, to keep the streets and buildings which are its property in good repair, maintenance of tanks entrusted to it for fishing or minor irrigation, sanitation, conservancy and lighting It is to engage itself actively in all developmental functions relating to agriculture, animal husbandry, industries, etc under the guidance of samitis. Keeping in mind the fact that the resources available to a large number of panchayats are meagre these Statutes usually include a proviso that the performance of the functions is subject to the financial position of the gram panchayat.

The taxes that are permitted to be levied in different states by the village panchayats broadly are house tax, profession tax, vehicle tax, tax on agricultural land, pilgrim tax, tax on fairs and festivals, entertainment tax, drainage tax, lighting tax, water tax, tax on fisheries, etc The list is illustrative and not exhaustive. While there are taxes which can be levied by each and every panchayat, some taxes can be levied in practice only by certain panchayats For example, pilgrim centres only can levy pilgrim tax

In the states of Assam, Jammu & Kashmir, Manipur, Meghalaya, Orissa, Rajasthan, Sikkim, Tripura and Uttar Pradesh, all taxes are optional for gram panchayats. In the remaining states, one or more taxes are compulsory. In the absence of penal provisions, some village panchayats may not levy even the compulsory taxes For example, a survey of the gram panchayats in one block from each revenue division of the state of Madhya

Pradesh in 1969 showed that 50 per cent of the panchayats in the selected blocks did not levy any tax—compulsory or optional

In addition to the specific taxes leviable by them, gram panchayats in Maharashtra, Gujarat and Madhya Pradesh can, subject to certain conditions, impose any tax which the state Legislature has the power to impose under the Constitution of India. In practice vesting of these additional taxation powers did not lead to any action by the gram panchayats.

A substantial portion of the income of gram panchayats is from taxes—optional or compulsory—and fees levied by them The Asoka Mehta Committee (1978) estimated the total receipts of gram panchayats in India at about Rs 113 crores by 1976-77, of which the receipts from taxes and fees were about Rs. 39 crores. Grants contributed the bulk of the non-tax revenue. Thus, the average income of gram panchayats can be said to be about Rs 5,000 per panchayat for the whole country. The average obviously varies from state to state. In Kerala, the average is over Rs. 1.1 lakhs per panchayat while in Uttar Pradesh, it is Rs. 640 One of the significant factors determining the income of a village panchayat is obviously its population. In Kerala, 95 per cent of the village panchayats have a population of more than 10,000 while in Uttar Pradesh about 80 per cent of the villages have a population of less than 1,000. A better pointer to the financial position of gram panchayats is the per capita receipts of the persons covered by all gram panchayats in the state. On this basis, Maharashtra and Gujarat top the list with Rs 8 41 and Rs 7.11, respectively, followed by Kerala (Rs. 5.61), Andhra Pradesh (Rs. 4.56) and Tamil Nadu (Rs. 3.78). The income of all panchayats from all sources works out to only 61 paise per capita in the most populous state of Uttar Pradesh

The Study Team on Panchayati Raj Finances headed by K. Santhanam recommended in 1963 that house tax, profession tax and vehicle tax should compulsorily be levied by gram panchayats in all states Reviewing the position a decade and a half later, the Asoka Mehta Committee on Panchayati Raj Institutions emphasised the need for some taxes being made binding upon the panchayati raj institutions. It was felt advisable that a select list of taxation powers should be given to the panchayati raj institutions, out of which some should be made compulsory.

Panchayat Samitis. The significance of panchayat samitis lies in the fact that they are conduits of departmental funds for developmental works within the blocks. The Statutes establishing panchayati raj institutions make this amply clear. For example, the Statute in Andhra Pradesh, listing the sources of income for a panchayat samiti includes funds relating to institutions and schemes transferred by the Government or Heads of Departments of Government to the panchayat samiti, funds relating to community development programmes, central and state aid, and aid received from the All India bodies and institutions for the development of cottage and village in-

dustries, etc In Maharashtra, the panchayat samiti has no corporate status and no panchayat samiti fund The Act does not indicate any resources for the panchayat samiti The state government gives to each panchayat samiti through the zilla parishad, a grant or grants under Section 188 for carrying out such works and developmental schemes as the state government may specify, with due regard being given to the subjects enumerated in the Second Schedule of the Act

The data from the annual reports of the Department of Community Development, Government of India, show that in certain states, the funds of departments other than the Community Development Department routed through panchayat samitis have been going up. The data indicate that while Andhra Pradesh, Gujarat, and Tamil Nadu have been consistently routing through the panchayat samitis a large segment of developmental funds of other departments, other states are either not so keen, or having been keen for some time, are having second thoughts on this procedure

In the states where panchayat samiti is a corporate body the Panchayati Raj Statutes generally specify some sources of taxation for the samiti. Some Acts, however, do not specify any powers of taxation for the samiti, while Punjab, Haryana and Himachal Pradesh empower the panchayat samitis to impose any tax for which the State Legislature has the power under the Constitution. The panchayat samitis in Andhra Pradesh and Orissa do not have powers of taxation, though in Andhra Pradesh, a samiti can impose a surcharge on the tax or fees levied by a village panchayat. In Bihar, the samitis can levy certain taxes. The panchayat samiti in Maharashtra can recommend an increase in the rate of cess on land revenue or an increase in tax or fee levied in the block. The panchayat union council in Tamil Nadu, can levy a surcharge on entertainment tax and tax on cinematographic exhibition (show tax) and also on local cess The samitis in Rajasthan are permitted to levy profession tax, a tax on fairs held in the area of the samiti and also to impose a cess on rent for the occupation of agricultural land at 5 paise per rupee and a primary education cess. In Gujarat, the tax revenue of the taluk panchayat consists of education cess and any of the taxes and fees leviable by gram or nagar panchayats and the proceeds from enhancing the rate of stamp duty which a taluk panchayat is empowered to levy In Karnataka, the taluk development boards can levy a duty on transfer of immovable property in the shape of an additional stamp duty and tax on sale of animals, not exceeding 25 paise for each animal As a consequence of the limited powers of taxation enjoyed by most of the panchayat samitis their income from taxes is not substantial

Zilla Parishads. The resources of zilla parishads have to be analysed in relation to their functions which have not changed much since the Santhanam Committee summarised the position in 1963 thus

"At one end stands the zilla parishad of Maharashtra which is conceived on a generous scale and is designed to take over the entire functions of government at the district level except law and order, justice, national and state highways, college and university education and institutes of importance for the state as a whole. At the other end, stands the district development council in Madras which is purely advisory, which has no funds of its own and of which the district collector is the chairman. Other zilla parishads may be divided into two categories. The zilla parishads of Mysore, Rajasthan, Punjab, Uttar Pradesh and Orissa are essentially advisory, but they also have functions of supervision and coordination of the work of samitis and panchayats Sometimes they distribute among the lower tiers funds received from all-India Institutions for khadi, social service, backward classes, etc In Andhra Pradesh, Assam and Gujarat, the zilla parishads have not only advisory and supervisory functions, but also some executive functions. In Andhra Pradesh, zilla parishad manages the government run secondary, vocational and industrial-schools, distributes plan funds, and determines the increased annual quota of teachers, etc. among samitis".

The mahkuma parishads in Assam, the zilla parishads in Maharashtra and Uttar Pradesh have specific powers of taxation. Every district panchayat in Gujarat can, after observing the prescribed procedures, impose any of the taxes and fees which are leviable by a gram or nagar panchayat subject to certain stipulations. In practice, the zilla pairshads rarely raise their own resources and the bulk of their receipts are grants from the state government for the schemes/works transferred to them or for which they act as agents for execution For example, in Andhra Pradesh in 1976-77, the total receipts of zilla parishads were Rs 51 crores of which the grants for schemes or works, etc. were Rs 47 crores. In Maharashtra, the zilla parishads have powers of taxation, but few districts have utilised these powers as is evident from the fact that in 1971-72 the income of zilla parishads of Maharashtra from taxes and fees constituted only 0 03 per cent of their total income. The local cess and local rate together accounted for about 5 per cent of the total receipts.

Grants and Assigned Revenues

Assigned Revenues. Before we consider the question of grants, we may describe the shared or assigned revenues Examples of these are the land revenue, cess on land revenue, surcharge on stamp duty, cess on water rate, entertainment tax and surcharge on entertainment tax. In all these cases, the government imposes and levies the concerned tax, cess, surcharge, etc. and the proceeds. in part or in full, are assigned to one or more tiers of

panchayati raj In some states, such assigned revenues are considered as the 'own resources' of the respective tiers of panchayati raj.

A significant source for consideration in this connection is land revenue. According to the Asoka Mehta Committee, nine states, *viz.*, Andhra Pradesh, Tripura, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, Orissa, Sikkim and Uttar Pradesh do not assign any share of land revenue to the panchayati raj institutions The total estimated receipts for 1976–77 from land revenue of the different state governments are about Rs 200 crores. The six states of Andhra Pradesh, Bihar, Madhya Pradesh, Maharashtra, Rajasthan and Uttar Pradesh account for 75 per cent of these receipts

In Assam, land revenue is assigned at the rate of 45 paise per capita to gaon panchayat and at 45 paise per capita to mahkuma parishad. The districts where mahkuma parishads are established they are assigned land revenue at 10 paise per capita of the population to establish equalisation funds. Of the total land rent received by the government in respect of lands in the State of Bihar, a minimum of 6¼ per cent is procured and distributed to gram panchayats in such proportion as may be prescribed by the government and a share of the land revenue is also given to the panchayat samitis and zilla parishads. The Government of Gujarat deducts 35 per cent of the collection of land revenue towards the salaries of Talati-cum-mantri and 5 per cent towards the State Equalisation Fund and distributes the remainder in specified proportions between gram panchayats, taluk panchayats, district panchayats, the District Equalisation Fund and the District Gram Encouragement Fund The Government of Haryana provides a maximum of 3 per cent of the total annual landholding tax to the gram panchayats and a maximum of 7 per cent to the panchayat samitis Provision for such assignments of land revenue are also found in the states of Himachal Pradesh, Madhya Pradesh, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal The state governments of Karnataka, Kerala and Maharashtra transfer the entire land revenue to the panchayati raj institutions

Cess on Land Revenue. Almost all the states levy the cess on land revenue which is known as local cess, local fund cess or local rate in some states There is no uniformity in respect of the rate of cess levied by different states. Other cesses are also collected by some state governments for specific purposes like education in Andhra Pradesh and sanitation in erstwhile Bombay presidency. The proceeds of such specific cesses are to be utilised for the specified purposes only. The cess collected by the government is usually passed on to one or more tiers of panchayati raj in a prescribed proportion.

The Statutes establishing the gram panchayats, panchayat samitis and zilla parishads usually provide for initiative for the respective panchayati raj institutions to increase the rate of cess for general or for particular

purposes Some of the state governments also provide an incentive by way of local cess matching grant to their panchayati raj institutions which take the initiative to increase the rate of cess The proceeds of cess are passed on to the gram panchayats in West Bengal, Uttar Pradesh, Kerala, Madhya Pradesh, Maharashtra and Jammu & Kashmir. In Karnataka, they are passed on to the taluk board.

Surcharge on the stamp duty is another source of revenue assigned to the panchayati raj institutions. The rates of surcharge and the categories of panchayati raj bodies that are entitled to receive the proceeds vary. The state governments of Andhra Pradesh, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Punjab, Tamil Nadu and West Bengal provide for this surcharge. The rate of surcharge is 5 per cent in Tamil Nadu and Andhra Pradesh, 4 per cent in Kerala, 3 per cent in Karnataka, 2 per cent in Punjab and West Bengal and half per cent in Maharashtra and Madhya Pradesh. The proceeds of the surcharge are entirely transferred to *(i)* panchayats in Kerala, Tamil Nadu and Punjab, *(ii)* samitis in Karnataka, Rajasthan and Madhya Pradesh, and *(iii)* parishads in Karnataka. Gujarat provides for an increase in the stamp duty at the requests of a district or taluk panchayat up to a maximum of 10 per cent and 15 per cent, respectively, and the extra amount thus realised is passed on to the concerned district or taluk panchayat. In Andhra Pradesh, the State Government retains 5 per cent of the surcharge proceeds. The entire net surcharge proceeds are paid to the municipal institutions and, as far as the panchayati raj bodies are concerned, they are apportioned (on the basis of collection) among the panchayats, samitis and parishads in the ratio of 3.1.1.

The receipts from the surcharge on stamp duty, being proportional to the stamp duty, which itself is dependent upon the value of the property would be fairly high in developed areas. For example panchayat samitis in Andhra Pradesh received Rs. 97.07 lakhs in 1976–77 as surcharge on stamp duty.

Grants. Grants from the state governments are a major source of income to the gram panchayats and the bulk of the receipts of panchayat samitis and zilla parishads are in the form of grants. The grants available to the panchayati raj institutions in different states take different forms The terminology used is not uniform and may also differ from institution to institution Even when it is called a grant it may in essence be an assigned revenue A brief description of these various categories of grants is attempted here.

Per capita grants depend upon the population of the village or villages within the jurisdiction of the concerned panchayati raj institutions. The Statutes usually indicate that the population for this purpose would be the population at the previous census. The per capita grant can be made either

from a specific account, say, land revenue, or can be without any reference to any specific account. Assam, Rajasthan, and Tamil Nadu assign land revenue on per capita basis. In Andhra Pradesh, gram panchayats and panchayat samitis get a per capita grant of 25 paise and 50 paise, respectively. The amount of the grant, made by an order but not laid down in the Statute is debited to the account under land revenue. In some other states, per capita grants are given from the general funds. In Rajasthan, the government gives a grant of Rs. 2 50 per head for general purposes. In Andhra Pradesh, the government gives a grant for communications at the rate of 60 paise per head of population which is distributed at the rate of 40 paise to panchayat samitis and 20 paise to zilla parishads This is the example of a per capita grant for a specific purpose An obvious advantage of this grant is its easy method of calculation, which would not take note of the increase in the population till the publication of the next census report. Further, populous villages irrespective of their needs or stage of development get large amounts.

It is in this context that the state governments have set up equalisation grants The purpose is primarily to see that the assignment of revenues and of plan projects take into account the need to upgrade backward areas and raise the levels of living of the weaker sections. The ways of constituting the Equalisation Fund and the methods of its disbursement differ from state to state Gujarat government provides for the creation of the State Equalisation Fund out of a portion of the receipts of land revenue to be utilised for making special grants to backward districts so as to minimise the socio-economic inequalities between various districts in the state. Similarly, there are Equalisation Funds at the district and taluk levels too in Gujarat for minimising the socio-economic inequalities between various areas in the district/taluk. The Government of Andhra Pradesh at the inception of panchayati raj constituted a non-lapsable fund of Rs. 32.50 lakhs as the equalisation grant to assist the backward panchayats in their economic programmes The Maharashtra government worked out an Equalisation Grant to gram panchayats to see that a gram panchayat would have at least a grant of one rupee per capita. Therefore, if the amount of grant of land revenue payable to a gram panchayat under section 131 of the Bombay Village Panchayat Act was found to be less than the amount arrived at on the basis of one rupee per capita of the population of the village, the panchayat is entitled to an equalisation grant equal to the difference between the two amounts. The Assam Panchayati Raj Act, 1972, provides for Assam Rural Development Fund which in addition to contribution from the state and central government and other sources consists of Equalisation Fund, equal to a share of land revenue which is a sum not less than 10 paise per capita of the population of the districts where mahkuma parishads have been established under the Act. The

Government of Pondicherry credits 20 per cent of the local cess levied on land revenue to the Panchayat Equalisation Fund

Then there are grants for specific purposes The expenditure on schemes transferred by the state government is provided by the state government through specific purpose grants. For example, if primary education is transferred to the panchayat samitis or zilla parishads as the case may be, education grants are provided for maintenance or construction of buildings, furniture, playgrounds, library, etc in addition to the expenditure on salaries of teachers Transfer of roads to panchayati raj institutions would necessitate grants for their maintenance and construction, Transfer of primary health centres to panchayat samitis, has to be followed by grants for medicines. Similar is the case with agricultural or animal husbandry schemes.

Further on the inauguration of panchayati raj institutions, certain state governments transferred the necessary personnel also from the state governments to the panchayati raj institutions necessitating the payment of their salaries, pensions, etc by the panchayati raj institutions The own resources of the panchayati raj bodies being meagre, they could not be expected to carry on the ever increasing burden of these payments. So, the state government gives establishment grants for expenditure or transferred personnel. For example, in Maharashtra, Section 133 of the Maharashtra Zilla Parishads and Panchayat Samitis Act, 1961 originally provided for the establishment grant a sum equal to seventy-five per cent of the overall annual cost on account of the salaries and allowances in respect of the posts held by the staff of that government which was transferred to the parishad to be appointed to the district services. The provision was subsequently revised and expanded in 1970. The state government provides grants for these matters in the state budget of each of the concerned departments under the head of assistance to panchayati raj bodies, or local bodies. The exact amount a panchayat / panchayat samiti / zilla parishad would get is determined either on the basis of a formula already prescribed by the government or on the basis of the approved estimates, submitted by the concerned panchayati raj institution.

Next in importance are the grants given as incentives. Broadly, they consist of two categories. Some may cover different aspects like unanimous elections, agricultural production or developmental work in general. In these cases the incentives usually takes the form of an award of a prize and / or a lumpsum amount The other kind of incentive applies to collection of taxes, raising of cess rates, etc. were matching grant is given depending on the amount collected, the percentage of cess raised, etc.

The matching grant as an incentive has a great potential. Examples of Tamil Nadu and Maharashtra may be noted. In Tamil Nadu, the village panchayats compulsorily levy and collect the village house tax subject to

minimum and maximum rates laid down by the government As an incentive for collecting the house tax in full, the government sanctions a grant of one rupee per one rupee of house tax collected by a village panchayat. The receipts from house tax in 1978–79 were estimated to be Rs 2 crores and so the Government of Tamil Nadu provided two crores of rupees in its budget as a matching grant Similar matching grants are provided by the Governments of Assam and Himachal Pradesh. The Tamil Nadu government gives a matching grant to the panchayat unions on the basis of the rate of local cess surcharge levied by them. That the various grants form the bulk of the receipts of panchayat samitis and zilla parishad in many states is evident from the data in Table 1.

Table 1 : Income from Panchayat Samitis

(Rupees in lakhs)

State	Own receipts@	Government Grants	Other Revenues	Total	Year for which data related
Andhra Pradesh	398 24	8901 96	85 72	9385 92	1977–78
Haryana	122 44	62 15	—	184 59	1975–76
Himachal Pradesh	95 71	50 79	—	146 50	1976–77
Orissa	12 37	2713 38	—	2725 75	1977–78
Tamil Nadu	4000 00	8109 49	—	12109 49	1977–78

@ include receipts from assigned share of Taxes, Cesses, etc

Income of Zilla Parishads

(Rupees in lakhs)

State	Own receipts	Government grants	Other Revenues	Total	Year to which the data relates
Andhra Pradesh	247 82	5314 60	119 64	5682 06	1977–78
Gujarat	325 38	9878 67	—	10204 05	1973–74
Haryana	38 90	9 17	55 96	104 03	1972–73
Maharashtra	596 05	8955 10	1488 72@	11039 67	1971–72
Uttar Pradesh	544 32	342.74	—	887 06	1976–77

@ Includes the amount provided by the State Government for performing agency functions.

The resources discussed so far, viz , taxes and fees, and the shared or assigned resources and grants together constitute a substantial portion of the receipts of panchayati raj institutions. The receipts may look impressive, but it would be pertinent to raise a query What is the proportion of expenditure of the state government that is made through the media of panchayati raj institutions? The Asoka Mehta Committee on Panchayati Raj Institutions cites in this connection the data relating to Maharashtra, "one of the best

examples of the working of Panchayati Raj". The data available to us from the budget estimates of the Government of Maharashtra for the year 1979-80 show that the expenditure on Revenue Account is Rs 1,512 88 crores Of this, the expenditure on transferred staff, schemes and works for which grants and loans are payable to zilla parishads and panchayat samitis under the Maharashtra Zilla Parishads and Panchayat Samitis Act, 1961 was estimated to be Rs. 202.35 crores, *i e*, less than 14 per cent of the total estimated revenue expenditure. If the estimated expenditure on agriculture and allied services alone is taken note of, it is found that the amount proposed to be transferred to zilla parishads and panchayat samitis is Rs 27.52 crores of the total estimate of Rs 287.07 crores The figures are self-explanatory This being the situation in "one of the vast examples of working of panchayati raj", the position in other states could be well imagined.

It may be noted that in the United States of America, the Federal Government, in pursuance of the State and Local Fiscal Assistance Act, 1972, was authorised to give general purpose grants of 30236 million dollars to the state and local governments for a period of five years from January 1, 1972. The period was later extended by three years Every local government authority gets the grant on the basis of a prescribed formula which takes into account population, per capita income and tax effort subject to a prescribed ceiling and floor. No such grant is available to panchayati raj institutions or urban-local authorities in India from the central government.

It appears that the quantum of funds available to panchayati raj institutions obviously did not have a strong impact on the rural areas. A large village panchayat can necessarily be taken to have a correspondingly large quantum of finances, but according to the census of 1971, only 21.6 per cent of the villages have a population of more than 1,000, indicating their possibility of a large number of panchayats—more than ¾th of the total number—may be having meagre resources. This is also substantiated by the fact that 71.3 per cent of the districts covering a population of 69 per cent are considered backward. Another fact worthnoting is that linking up all villages with a population of 1,000 or more with roads has not been still achieved and has been included in the Revised Minimum Needs Programme to be achieved by 1988. Further of the over 5 lakh villages in India, it was found out in a survey conducted in 1972-73, that 1.52 lakhs were identified as problem villages in respect of safe drinking water. These could be of three kinds (i) lacking in assured source of drinking water within a reasonable distance, say 1.6 km., (ii) being susceptible to water-borne diseases like cholera. and guinea worms and (iii) water having salinity, iron or fluorides. Provision of safe drinking water being one of the responsibilities of the panchayati raj bodies these things could have been tackled by them long ago. That this was not done indicates failure on the part of panchayati raj institutions on this front

Secondly, as on October, 1977, nearly 36 per cent of Indian villages had been electrified. How many of the remaining villages which were covered by the village panchayats have even kerosene lights provided for is a moot question. Though the available data does not throw light on this aspect, there is reason to believe that the position is not bright

Remunerative Enterprises

Panchayati raj institutions may establish remunerative enterprises to increase the employment opportunities in their area or to improve their own financial resources. Numerous examples of such enterprises can be thought of. Shops, markets, rest houses and cultural halls, which, with the growth of population and the increasing urbanisation of rural areas, would ensure a steady and growing income, can be constructed by the panchayati raj institutions. Planting of fruit-bearing trees, produce of which could be auctioned, may be taken up with small investment Scientific pisciculture can be encouraged to become a valuable source of income. Small-scale industries like rice and flour mills, brick-making, bone crushing, canning of fruits and bottling of fruit juices can be taken up by panchayats Imaginative and dynamic leadership would be able to identify and take up profitable enterprises at the appropriate level Data available on the income from remunerative enterprises of certain panchayati raj institutions showed that their earnings could be substantial In Andhra Pradesh, 12½ per cent of the income of gram panchayats in 1974-75 was from remunerative enterprises and three-tenths of this was from pisciculture The income of village panchayats in Tamil Nadu from remunerative enterprises went up from Rs 12.31 lakhs in 1966-67 to Rs 57.02 lakhs in 1976-77 while that of town panchayats and panchayat unions on the same account shot up, respectively, from Rs. 42 47 lakhs to Rs 123 lakhs and from Rs. 23.19 lakhs to Rs. 120 lakhs in this period In Andhra Pradesh, the income of gram panchayats from remunerative enterprises was Rs 156 41 lakhs in 1974-75 and Rs. 190.21 lakhs in 1975-76. The Government of Uttar Pradesh and Orissa have taken some steps in establishing industries through the panchayati raj institutions since 1960.

There are provisions in the Acts of different states for vesting in village panchayats various proporties of the State Government like porambokes, roads, bridges and culverts, tanks, water ways, minor irrigation sources, grazing lands, unreserved forests, trees on public lands, lamps and lamp posts, fisheries and other types of communal property Some of the Acts make such transfer mandatory, while others contain only enabling provisions. The panchayati raj institutions derive great benefit from such vesting. In Haryana, *shamlat* lands are vested in the gram panchayats Of the land thus vested, cultivable area of 2 22 lakh acres are auctioned every year and the income from this sources in 1977-78 was Rs 2 2 crores In Punjab too, almost 50 per cent of the total income of panchayats is from *shamlat*

lands owned by the panchayats. The income therefrom in 1977-78 was Rs. 3.13 crores.

Loans

The Statutes establishing panchayati raj institutions in different states provide also for raising of loans by the different tiers of panchayati raj either from other higher tiers of panchayati raj or from the state government or from any other agency. The powers to raise loans are controlled by rules and regulations made for the purpose by the state government. Usually these loans could be for establishing remunerative enterprises or for providing for schemes like protected water supply in rural areas. In Maharashtra zilla parishads, with the state government as guarantor have taken loans from the Life Insurance Corporation of India, for rural water supply schemes.

Public Contributions

Public contributions may take the form of payment in cash or *shramdan*, or contribution in the form of land or building for educational. medical or other activities. The receipts on this account have been quite meagre over the years.

To conclude, we may sum up the salient features of the financial resources of panchayati raj institutions. These institutions derive their powers of taxation from the State laws. The powers, though impressive. are rarely utilised by the panchayat samitis or zilla parishads while the gram panchayats in many a state collect the compulsory taxes The income of gram panchayats, which cover almost all the rural population in many a state in India, was about Rs. 113 crores in 1976-77. Of this, receipts from taxes amounted to about Rs 39 crores. The bulk of the receipts of panchayat samitis and zilla parishads was from grants and assigned revenues indicating thereby that the popular representation in these bodies has not led to any appreciable effort to use the available powers of taxation for bringing in more revenues for developmental works and other schemes which may have local priorities. Incentives by way of matching grants did lead in some cases to initiative to raise more resources. The funds actually transferred to panchayati raj institutions are meagre and the impact of all these programmes on rural areas is not bright. There is a great potential for receipts from remunerative enterprises which can be developed by a dynamic and imaginative leadership at the official and non-official levels.

PLANNING FOR IMPLEMENTATION, MONITORING AND CONTROL OF RURAL DEVELOPMENT PROJECTS

K S Ramesh

Introduction

The development plans that have been formulated and implemented in rural India fall into two categories: The first were geared to bringing about structural changes with respect to a given area, while the second were for a defined target group Programmes like the Intensive Agricultural District Programme (IADP), Cammand Area Development Progarmme (CADP), Drought Prone Area Programme (DPAP) are some examples of the first group Small Farmers Development Agency (SFDA), Applied Nutrition Programme (ANP), Tribal Development Programme (TDP) belong to the second type

Whatever be the type of activities, either focussed on a given area or target group, a set of resources are committed to achieve the programmed goals and objectives which are called the *inputs* These resources are utilised or *processed* in order to achieve a set of objectives realised in the form of *output*. For making the process more efficient and effective there is need to have a *control* mechanism in terms of an administrative machinery with a given set of policy guidelines which are called *restrictions* There is also a need to have a *feedback* system by which it would be possible to compare the output of the development plan with the inputs utilised These six components of the development activities are thus interrelated and they could be assembled in a schematic form which may be called the development plan system * The systems model depicted in Fig 1 could be used to illustrate the role of the six components mentioned above in development planning

Integrated Project Planning and Management Cycle (IPPMC)

Rural development programmes, formulated by and large at a district level, can be divided into a set of projects For example, IADP in a district would comprise projects like land development, credit supply, input distribution, marketing, etc Each project would be then a package of activities where everyone of them have to be accomplished within a given duration of time Thus we could define a project a set of activities which are time bound, and that they are properly scheduled and assembled

The projects need to be planned carefully and implemented effectively in order to realise the given objectives In the process of formulation and

* A system could be defined as an assembly of a finite member of entities where the relationship between every unit and every other is well known and the assembly is made to achieve a given goal

implementation of development projects there are six stages which come in a cyclic order. To start with, a set of possible activities, over which investment of resources could be made, are *identified* to meet the given objective(s). They are *formulated* in operational terms by specifying what type of resources need to be mobilised and committed, and in what quantity. In the third stage, these investment proposals have to be scrutinised to examine their economic viability, social and political acceptability and the technical feasibility. This stage is known as *project appraisal*. The next step would be the development of the plan. Such a plan will be called *implementation or management plan*, formulated using network techniques. This exercise, in other words, could be called time budgeting. However thorough planning may be and whatever may be the scientific techniques followed to formulate the plan, time schedule slippages and cost overruns are bound to happen during its implementation. Therefore, a control device supported by an appropriate *monitoring* system would be necessary to perform a concurrent evaluation of the project to ensure that the resources, including time, are judiciously and efficiently utilised.

In the final stage the project is evaluated thoroughly with a view to examining whether the objectives have been fully achieved, the type of impact the development project made on the area as well as the beneficiaries and that the resources were deployed judiciously. Thus, the six phases of the project planning and management cycle are identification, formulation, appraisal, implementation planning, monitoring and evaluation. This is an unending process as one phase leads to the other and the terminal stage of the project cycle, namely, evaluation, leads to better understanding while identifying similar investment projects in future. This could be depicted in the form of a cycle as given in Fig. 2.

Network Techniques

The plan that could be formulated for implementing a project can be based upon network techniques, wihch were originally designed for industrial project management. However, its applicability to management of development projects, particularly in the rural sector, is of recent origin.

The network techniques are of two types, one is known as the Critical Path Method (CPM) and the other, Programme Evaluation and Review Technique (PERT). A team of scientists including mathematicians and economists evolved an appropriate time scheme for undertaking the overhauling of a set of machines in a manufacturing industry in United Kingdom in 1952. Each one of the jobs to be performed in the overhauling of the system was well known to the engineers and also the time required to perform each one of them. They developed a time schedule whi[illegible] ally called the Critical Path Method network. In United States of America around the same period, a team of economists and engineers [illegible]

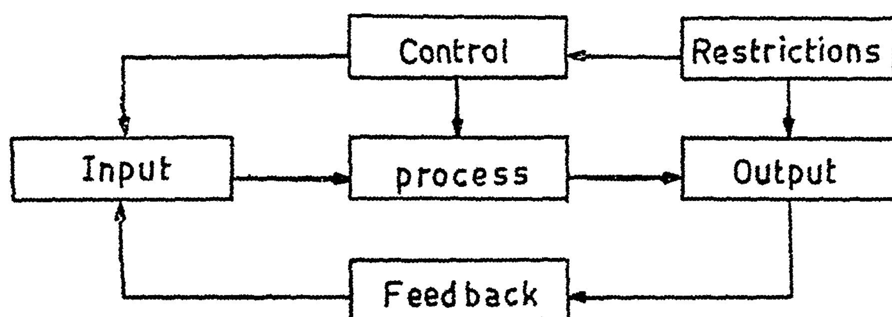


Fig. 1 A SYSTEMS MODEL

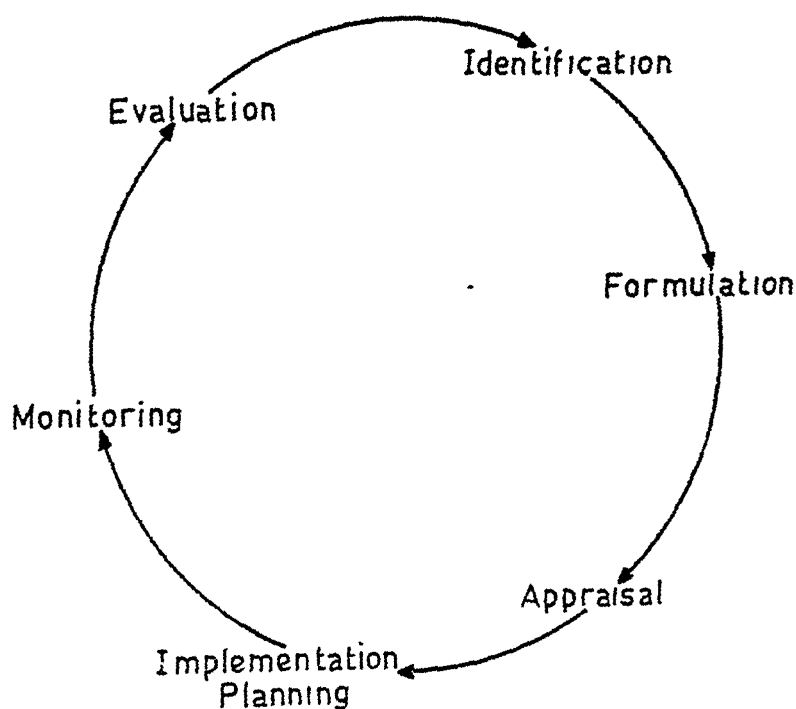


Fig. 2 INTEGRATED PROJECT PLANNING AND MANAGEMENT CYCLE

scheduling plan for launching a polaris missile The time duration required for performing each of the jobs was not known to them and this had to be statistically estimated using a set of guidelines This plan was later known as Programme Evaluation and Review Technique. Nevertheless, today management scientists do not make a distinction between the CPM and PERT but call them network plans

Developing a Network Plan

Any project can be broken into a set of identifiable jobs or activities. Each activity would always begin with a distinct event and end with another distinct event. As a result of an event occuring, one or more activities can simultaneously start Such an event would be called a burst event. Similarly, an event is said to occur if and only if a set of activities are all completed and such an event would be called a merge event. If more than one activity can be simultaneously performed they would be called concurrent or parallel activities

While developing a network plan the steps mentioned below have to be followed ·

1) identify all activities to be performed for the project;
2) establish the logical sequence in which the activities will have to be performed , and
3) determine the time duration to be allotted for performing each of the activities

If the above mentioned steps are followed in the same sequence a network plan could be developed by assembling the activities using the network technique notations, explained in Appendix I. After assembling the activities in the form of a network plan it would be possible to estimate the total duration of the project, identify the key activities which had to be performed according to a given time schedule without any delay, and also identify such of those activities where surplus time is available for their execution The key activities mentioned above are called critical activities A critical activity is one which has to be started and completed according to the original time schedule but for which the overall project would consequently get delayed. In the case of non-critical activities delay would be permitted and the total permissible delay is also known before hand

A Case Illustration

We shall illustrate the method of developing a network plan by taking as an example a project known as Operation Flood Project. This project is to be implemented in Rameshwaram district. The project would be funded by the World Bank The major objective of the projects are: (1) to increase

milk production, (2) generate employment opportunities for the weaker sections in the district, and (3) provide all necessary support services for sustaining dairy development activities

A careful analysis of the project resulted in identification of nine major activities to be performed in the project These are: (1) negotiate loan with World Bank, (2) arrange veterinary services, (3) establish milk chilling plants; (4) establish frozen semen bank, (5) set up milk collection centres; (6) organise milk producers' cooperative societies, (7) set up feed mixing plants, (8) distribute milch animals, and (9) integrate the activities under stage I to observe the performance of the project

The following network logic was adopted in developing the plan

> Negotiation of loan with the bank need not wait for any other activity; this would be the initial activity in the project. As soon as the loan is obtained, veterinary services, milk collection centres, milk producers' cooperative societies, feed mixing plant, frozen semen bank and milk chilling centres should all be simultaneously established. The milch animals will not be distributed to the beneficiaries until the cooperative societies are established, milk collection centres are set up and feed mixing plant is constructed.
>
> The integration of the activities under the first stage of the project would be performed only after establishing veterinary services. distributing milch animals, setting up frozen semen banks, and constructing milk chilling plants The network logic described above is presented in Table I

Table I : Network Logic

Activity Code	Activity Description	Activity Duration (in Months)	Immediate Predecessor
A	Negotiate loan	4	—
B	Set up milk collection centres	12	A
C	Organise milk producers cooperative societies	4	A
D	Set up feed mixing plants	12	A
E	Arrange veterinary services	12	A
F	Distribute milch animals	4	B. C, D
G	Establish frozen semen bank	32	A
H	Establish milk chilling plants	28	A
I	Integrate stage I activities	4	E, F, G, H

The time duration required to perform each of the activities were also arrived at using a set of statistical techniques and eventually used for estima-

ting total project time. The network plan for the project along with the time duration for performing each of the activities and the activity codes are presented in Fig. 3

The above given network plan can be analysed to estimate the earliest possible time at which each of the events can be realised and also the latest possible time schedule The earliest occurrence time of the events is arrived at by the forward pass method where we calculate the maximum time required to reach the event while going forward Similarly, the latest occurrence time schedule is arrived at by backward pass method, where we take the minimum time that is required to arrive at at the event while going backward. The events, whose early occurrence and late occurrence are one and the same, would be called critical events. It means that the realisation of these events can neither be preponed nor postponed

The early start schedule, early finish schedule, late start schedule and late finish schedule for each of the activities can be arrived at using the following rules:

- Early start time of an activity is the earliest time at which its predecessor event can be realised
- Early finish time of an activity is the sum of the early start time and the duration required to perform that activity.
- Latest finish time of an activity is the latest time by which its successor event can be realised
- Late start time of an activity is the difference between its latest finishing time and the duration of time required to perform that activity.

If the earliest starting and the latest starting time are one and the same, that activity would be called a *Critical Activity* For those activities whose late start time is greater, then the early start time would be called non-critical activities and the difference between the two would indicate the surplus time available for the commencement of that activity which would be called the float.

The time scheduling procedures and analyses mentioned above have been worked out for Operation Flood Project and the results are presented in Table 2

The critical activities thus identified have to be effectively controlled, both with respect to their commencemnt and completion so that the overall project does not get delayed. The path which traverses along the critical activities is known as the critical path. This gives an idea of the chain of activities which had to be monitored for ensuring timely completion of the project While the project management can afford to be a bit liberal with reference to non-critical activities, the maximum delay permissible would

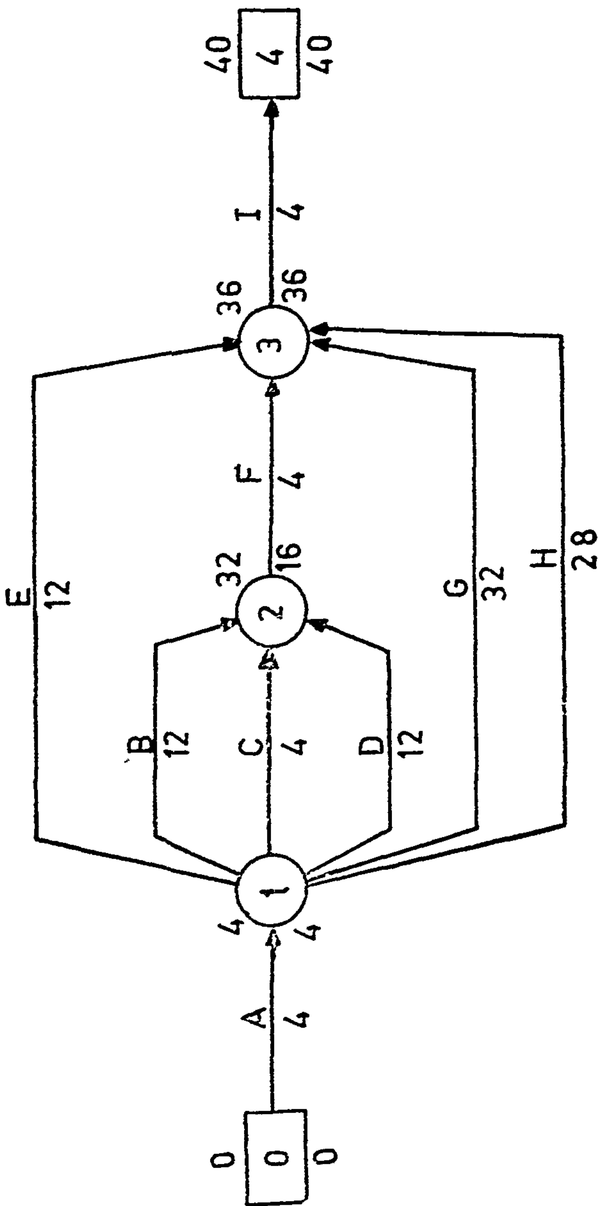


Fig. 3 A NETWORK PLAN FOR 'OPERATION FLOOD' PROJECT

Table 2 : Time Analysis

Activity Code	Early		Activity	Late		Float
	Start	Finish	Duration	Start	Finish	
* A	0	4	4	0	4	0
B	4	8	4	28	32	24
C	4	8	4	28	32	24
D	4	16	12	20	32	16
E	4	16	12	24	36	20
F	16	20	4	32	36	16
* G	4	36	32	4	36	0
H	4	32	28	8	36	4
* I	36	40	4	36	40	0

* Critical Activities

also be known from the quantum of float available. Any delay beyond the float would only result in delayed completion of the project

Funds Planning

The network plan thus developed would not only enable the project management to identify each of the activities to be effectively controlled but also provide an appropriate basis to plan for funds and other resources. Since each of the activities is very intimately known to the project management, besides the duration of time required to perform them, it would also be possible to estimate the manpower, material, financial and machinery requirements for performing each one of them. The funds required to perform each of the activities are presented in Table 3.

The funds release pattern decided by the Bank is given in Table 4.

Keeping in view the funds requirements pattern we may develop a time scale network* for the project and estimate the funds requirements for each unit of time with reference to individual activities. The time scale network according to the early start schedule along with the funds requirements are given in Fig. 4

Similarly, the time scale network drawn according to the late start schedule along with the funds requirements are given in Fig 5.

The cumulative funds required both according to the early started schedule and the late srarted schedule have been computed over the period of time and are presented in Fig. 6.

In addition to this information we also know the release pattern which was suggested by the World Bank for which a cumulative funds profile has been worked out and depicted on the same figure. The release pattern profile

* A time scale network is one in which each activity is drawn to a given scale

Table 3 : Funds Requirements

Activity	Duration*	Funds** Required	Funds Release Pattern
A	4	100	Uniformly distributed
B	12	300	One lakh per month
C	4	50	Uniformly distributed
D	12	300	Uniformly distributed
E	12	200	First month one lakh Next month 1/2 lakh Last month 1/2 lakh
F	4	5000	Uniformly distributed
G	32	500	First four months 1/2 lakh each Second four months 3/4 lakh each
H	28	300	First two months 1/4 lakh each Next five months 1/2 lakh each
I	4	50	Uniformly distributed
Total	—	6800	

* Duration in Months

** In Lakhs of Rupees

Table 4 : Proposed Release Pattern

Period	Amount (Rs In Lakhs)
First 8 Months	300
Second 8 Months	500
Third 8 Months	2500
Fourth 8 Months	As You Like It
Fifth 8 Months	As You Like It

comes in between the early start schedule and the late start schedule It means that the implementation of the project according to the early start schedule would result in shortage of funds while going according to the late start schedule would lead to surplus funds at all points of time.

In case of shortage of funds the project implementation would definitely have shortcomings and the surplus funds made available would only result in locking up scarce resources. Therefore, it is necessary to schedule the implementation of the project in such a manner that the funds requirement profile matches with the release pattern. For this purpose, the exercise known as resource levelling will have to be carried out where each of the activities has to be suitably scheduled keeping in view the float available to

Fig. 4

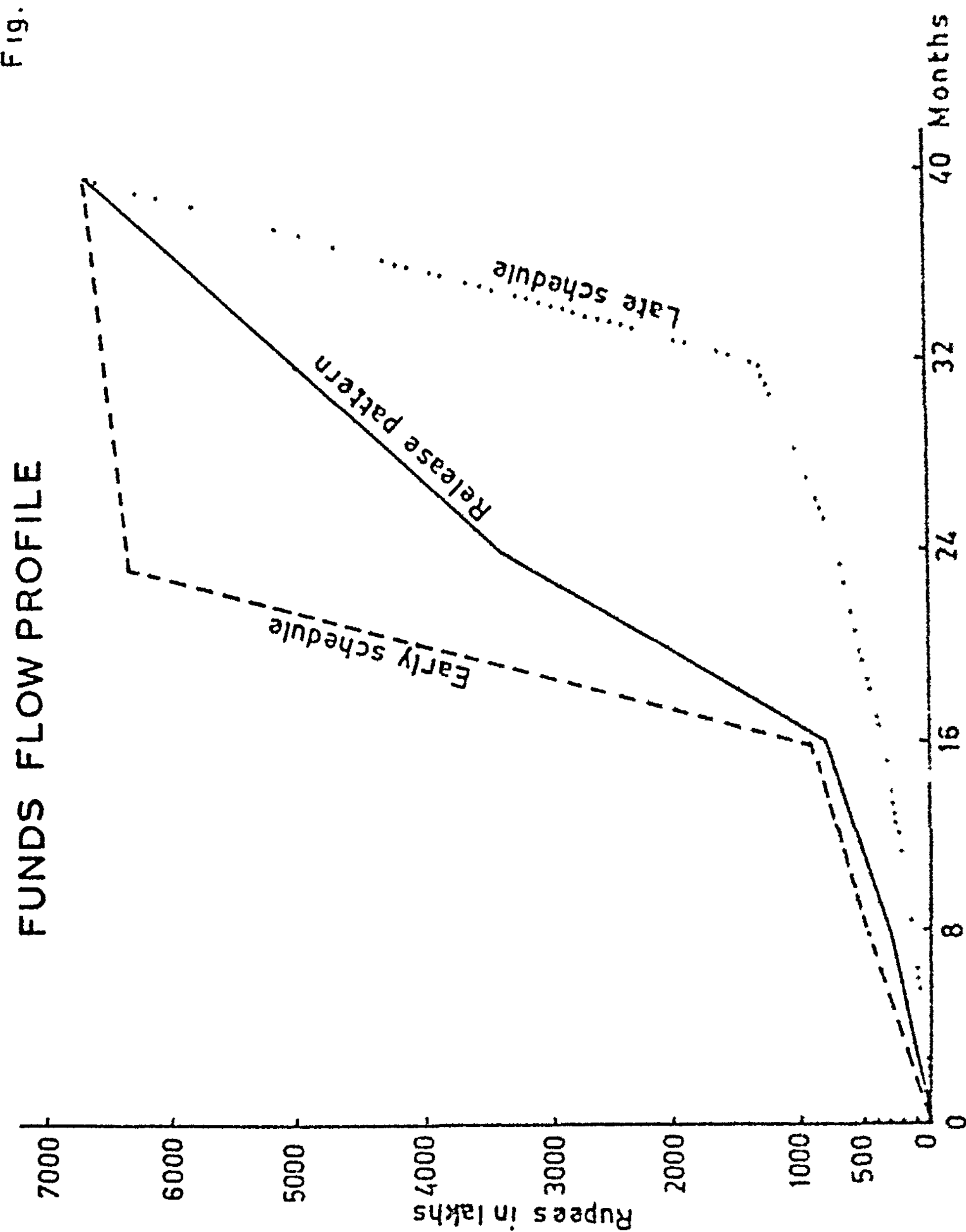
FUNDS PLANNING - AS PER EARLY SCHEDULE

	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
* A	100									
B		100	100	100					*	
C		50							*	
D		100	100	100					*	
E		100	50	50					*	
F					5000					
* G		50	50	50	50	75	75	75	75	
H		25	25	50	50	50	50	50		
* I										50
Monthly requirements	100	425	325	350	5100	125	125	125	75	50
Bi-monthly	525		675		5225		250		125	
Loan to be released	400		700		2500		As you like it		As you like it	

Fig. 5

FUNDS PLANNING - LATE SCHEDULE

	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
A	100									
B						100	100	100		
C								50		
D						100	100	100		
E						100	50	50		
F									5000	
G		50	50	50	50	75	75	75	75	
H			25	25	50	50	50	50	50	
I										50
Monthly requirements	100	50	75	75	100	425	375	425	5125	50
Bi monthly	150		150		525		800		5175	
Loan to be released	400		700		2500		As you like it		As you like it	


FUNDS FLOW PROFILE
Fig. 6
Release pattern
Early schedule
Late schedule
Rupees in lakhs
7000
6000
5000
4000
3000
2000
1000
500
0
0
8
16
24
32
40 Months

them and also the logical sequence in which they have to be performed The result of funds level analysis would give rise to a schedule presented in Fig 7. As per this schedule, the release pattern and the requirement pattern match for the first 16 months of the project and later on generates a surplus of Rs. 225 lakhs from 16th to 24th month Later the requirements of the project management would be fulfilled by the World Bank.

Project Monitoring and Control

A detailed plan for implementation could be developed using scientific methods and procedures Nevertheless its implementation in toto depends upon the type of coordination and the leadership we have for the project. Besides these two factors, a sound monitroing and control system would also contribute to the effective implementation of the project, whereby the time schedule would be strictly adhered to and the resources are effectively controlled. Monitoring system is a device by which periodically the project management would get the feedback which would be analysed and interpreted in order to arrive at meaningful and well informed decisions.

In the past, government departments adopted several procedures for reporting information, but most of them remained decorative pieces in the form of maps, charts, reports and seldom used for taking decisions or for introducing mid-course corrections. The information generated for the operation of government departments were from annual and other periodical reports, minutes of meetings, etc However, no proper arrangements were made for storing the information or for its retrieval. On the contrary, the management information system (MIS) has made a substantial dent in the industrial management environment Due to increase in the quantum of activities undertaken by the industries and also the growing complexity of the decision-making processes in industrial management, the system has become an integral part of the management The system can be installed in government departments too and would lead to better implementation of the development plans.

The first step in designing a project information system would be to list out all information bits which would possibly be required at one time or the other, and also by one level of the management or the other Secondly, the periodicity for reporting these information should also be determined. The next step would be to evolve suitable proformae in which information would be reported, and determine the channel through which information should flow. The channel would have a direct bearing on the organisational structure which plans, implements and monitors the progress of the project

The system thus designed would only be a pilot system which needs to be tested for its applicability and workability over a period of one year. During the pilot run period the management could possibly come to know that they need much more information than what was originally listed or

Fig. 7

LEVELLED FUNDS PLAN

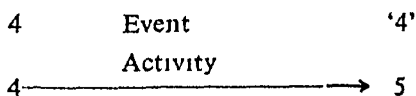
	0–4	4–8	8–12	12–16	16–20	20–24	24–28	28–32	32–36	36–40
* A	100									
B		100	100	100						
C		50								
D		100	100	100						
E			100	50	50					
F					1000	1000	1000	1000	1000	
* G		50	50	50	50	75	75	75	75	
H			25	25	50	50	50	50	50	
* I										50
Monthly requirements	100	300	375	325	1150	1125	1125	1125	1125	50
Bi-monthly	400		700		2275		2250		1175	
Loan to be released	400		700		2500		As you like it		As you like it	

some bits of information would be redundant. The periodicity may also be revised. based upon the experience gained through the pilot run, or the channel may be have to be altered in order to improve the system.

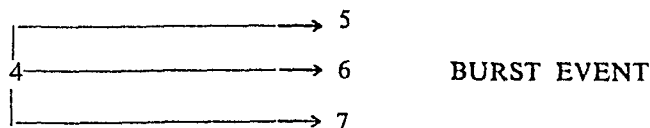
After designing the system it would be necessary to work out the cost effectiveness of its performance. It would mean estimating the cost involved in operating the system and comparing it with the benefits it would generate. The cost of operating the system would be on account of expenditure incurred on the personnel who might possibly be appointed for managing the system, stationery and postage charges, etc. Without a system of the kind described above, the management of the project would have been on different lines. By installing a new system what are the relative benefits and advantages derived? If the benefits are compatable to the cost incurred on operating the system then it could be called a viable system. Unless the economic viability of the new procedure to be adopted is established, beyond doubt it is not advisable to go in for the new procedure. These are some of the points which have to be borne in mind while designing an information system for monitoring and controlling project implementation.

Appendix I

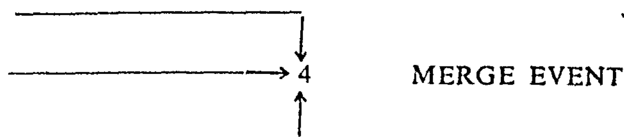
Any activity would begin with an identifiable event and end with another eve The activities and events are given in the following symbols



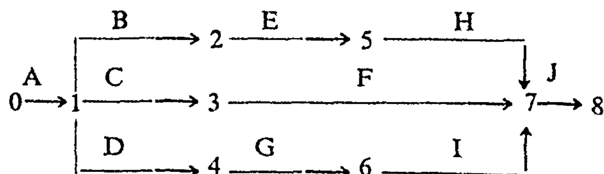
An event which gives rise to 2 or more activities is called a burst event



When an event is said to occur only after completing 2 or more parallel activit such an event will be called merge event



The network logic for the following network can be described as given below



As soon as activity A is completed, activities B, C & D could be simultaneous undertaken. Activity can be performed only after B, F after C, G after D, H after and I after G. The last activity J can be started only after completing activit F, H and I

Using these conventional notations a network plan is developed.